SDMS DocID 2232382

ORIGINAL

LORD

Lord Corporation
2000 West Grandview Blvd.
P. O. Box 10038
Erie, PA 16514-0038
814:868-0924
FAX: 814:864-3452

SENT VIA UPS NEXT DAY AIR

Mr. Victor Janosik, RPM (3HS22)
Western PA Section
United States Environmental Protection Agency, Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

Received 2/15/05 by V. Janosik, RPM

February 10, 2005

Reference: Lord-Shope RA Monthly Progress Report

Dear Mr. Janosik:

Enclosed are the two months of lab data you requested for your analysis.

If you or a member of your staff has any questions about the data, please feel free to call George Marton, Manager of Analytical Services. His phone number is (814) 868-0924, est. 3352.

Sincerely,
LORD CORPORATION

George M. Kickel
Manager, Environment, Safety & Health

Attachments

GMK05008/cmf

INTER-OFFICE
CORRESPONDENCE

LORD®

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ISO 9001
QS-9000

ORIGINAL

DATE: December 20, 2004

TO: Mia Coppola

FROM: Fred J. Drone

SUBJECT: Shope ISVS

Attached are the results for VOC and Methane samples collected at Shope on 11/16/2004.

Fred Drone
Lord Analytical Laboratory
2000 West Grandview Blvd.
Erie, PA 16509
(814) 868-3611

Cc: E0411.05 file

ORIGINAL

SAMPLE ID: **T.O. EXHAUST**

GCMS FILE 04SH84TOE24

	Target Compound	Conc.(PPB)
1	Chloromethane	
2	Vinyl Chloride	
3	Acetone	8.6
4	2-Propanol	
5	Methylene Chloride	
6	Trans-1,2-Dichloroethene	
7	1,1-Dichloroethane	
8	2-Butanone (MEK)	79.5
9	Cis-1,2-dichloroethene	
10	Chloroform	
11	Tetrahydrofuran	
12	Benzene	
13	Trichloroethene	24.8
14	4-Methyl-2-Pentanone (MIBK)	
15	Toluene	
16	Tetrachloroethene	9.8
17	Chlorobenzene	
18	1,3-Dimethylbenzene	
19	1,2-Dimethylbenzene	
20	1,1,2,2-Tetrachloroethane	

TIC Compound(s)	
phosgene	1575
4,4-dimethyl-2-oxetanone	278
unknown	50
unknown	125
unknown	47
unknown	26
unknown	44
cyclohexane	161
unknown silane	282
N,N-dimethylacetamide	116
unknown	46

ORIGINAL

SAMPLE ID: **T.O. INFLUENT**

GCMS FILE 04SH84TOBI23

	Target Compound	Conc.(PPB)	
1	Chloromethane		
2	Vinyl Chloride	705.5	
3	Acetone		
4	2-Propanol		
5	Methylene Chloride	50.0	
6	Trans-1,2-Dichloroethene	18.0	
7	1,1-Dichloroethane	75.5	
8	2-Butanone (MEK)	239.0	
9	Cis-1,2-dichloroethene	18898.5	E
10	Chloroform	706.5	
11	Tetrahydrofuran	16.0	
12	Benzene	77.0	
13	Trichloroethene	37332.0	E
14	4-Methyl-2-Pentanone (MIBK)		
15	Toluene	64.5	
16	Tetrachloroethene	2022.5	
17	Chlorobenzene	11.5	
18	1,3-Dimethylbenzene	114.5	
19	1,2-Dimethylbenzene	175.0	
20	1,1,2,2-Tetrachloroethane		

TIC Compound(s)	
unknown	305.0
unknown	295.0
unknown	410.0
unknown	710.0
unknown silane	10755.0
N,N-dimethylacetamide	5650.0

ORIGINAL

SAMPLE ID: **EX-1**

GCMS FILE 04SH84EX120

	Target Compound	Conc.(PPB)
1	Chloromethane	
2	Vinyl Chloride	
3	Acetone	
4	2-Propanol	
5	Methylene Chloride	
6	Trans-1,2-Dichloroethene	
7	1,1-Dichloroethane	
8	2-Butanone (MEK)	
9	Cis-1,2-dichloroethene	844.5
10	Chloroform	
11	Tetrahydrofuran	
12	Benzene	
13	Trichloroethene	185.0
14	4-Methyl-2-Pentanone (MIBK)	
15	Toluene	
16	Tetrachloroethene	
17	Chlorobenzene	
18	1,3-Dimethylbenzene	
19	1,2-Dimethylbenzene	
20	1,1,2,2-Tetrachloroethane	

TIC Compound(s)

ORIGINAL

SAMPLE ID: EX-2

GCMS FILE 04SH84EX221

	Target Compound	Conc.(PPB)	
1	Chloromethane		
2	Vinyl Chloride	1117.5	
3	Acetone		
4	2-Propanol		
5	Methylene Chloride	137.0	
6	Trans-1,2-Dichloroethene	109.5	
7	1,1-Dichloroethane	192.0	
8	2-Butanone (MEK)	550.0	
9	Cis-1,2-dichloroethene	56852.5	E
10	Chloroform	1615.0	
11	Tetrahydrofuran		
12	Benzene	209.0	
13	Trichloroethene	98554.5	E
14	4-Methyl-2-Pentanone (MIBK)		
15	Toluene	117.5	
16	Tetrachloroethene	7745.0	
17	Chlorobenzene	66.0	
18	1,3-Dimethylbenzene	157.0	
19	1,2-Dimethylbenzene	373.0	
20	1,1,2,2-Tetrachloroethane		

TIC Compound(s)	
UNKNOWN	1000.0
UNKNOWN	1220.0
UNKNOWN	1115.0

ORIGINAL

SAMPLE ID: EX-3

GCMS FILE 04SH84EX322

	Target Compound	Conc.(PPB)
1	Chloromethane	
2	Vinyl Chloride	
3	Acetone	
4	2-Propanol	
5	Methylene Chloride	
6	Trans-1,2-Dichloroethene	56.5
7	1,1-Dichloroethane	
8	2-Butanone (MEK)	
9	Cis-1,2-dichloroethene	3759.0
10	Chloroform	40.0
11	Tetrahydrofuran	
12	Benzene	
13	Trichloroethene	8166.0
14	4-Methyl-2-Pentanone (MIBK)	
15	Toluene	
16	Tetrachloroethene	1383.5
17	Chlorobenzene	
18	1,3-Dimethylbenzene	
19	1,2-Dimethylbenzene	22.0
20	1,1,2,2-Tetrachloroethane	

TIC Compound(s)

ORIGINAL

SAMPLE ID: **METHOD BLANK**

GCMS FILE 04VGMB4323

	Target Compound	Conc.(PPB)
1	Chloromethane	
2	Vinyl Chloride	
3	Acetone	
4	2-Propanol	
5	Methylene Chloride	
6	Trans-1,2-Dichloroethene	
7	1,1-Dichloroethane	
8	2-Butanone (MEK)	
9	Cis-1,2-dichloroethene	
10	Chloroform	
11	Tetrahydrofuran	
12	Benzene	
13	Trichloroethene	4.0
14	4-Methyl-2-Pentanone (MIBK)	
15	Toluene	
16	Tetrachloroethene	1.0
17	Chlorobenzene	
18	1,3-Dimethylbenzene	
19	1,2-Dimethylbenzene	
20	1,1,2,2-Tetrachloroethane	

TIC Compound(s)	
N,N-dimethylacetamide	199.0

ORIGINAL

VOC samples collected at Shope on 11-16-2004

Sample File:	Sampling Point
04VGMB4323	Method Blank
04SH84TOE24	Thermal Oxidizer Exhaust
04SH84TOBI23	Thermal Oxidizer Influent
04SH84EX120	Cap Well # 1
04SH84EX221	Cap Well # 2
04SH84EX322	Cap Well # 3

Guages:

	In. W.C.	Temp. deg. C
Cap # 1	24	14
Cap # 2	18.0	28
Cap # 3	0	10
Cap #1(Pitot)	> 2	
Cap #2(Pitot)	> 2	
Cap #3(Pitot)	> 2	

Monitor:
at time: 13:30

Landfill flow	161	SCFM
Crest flow	-	SCFM
Vapor Temp	80	deg. F
Ext. Vapor Vac	43	in. water

*The valve to EX-3 port is in the closed position.

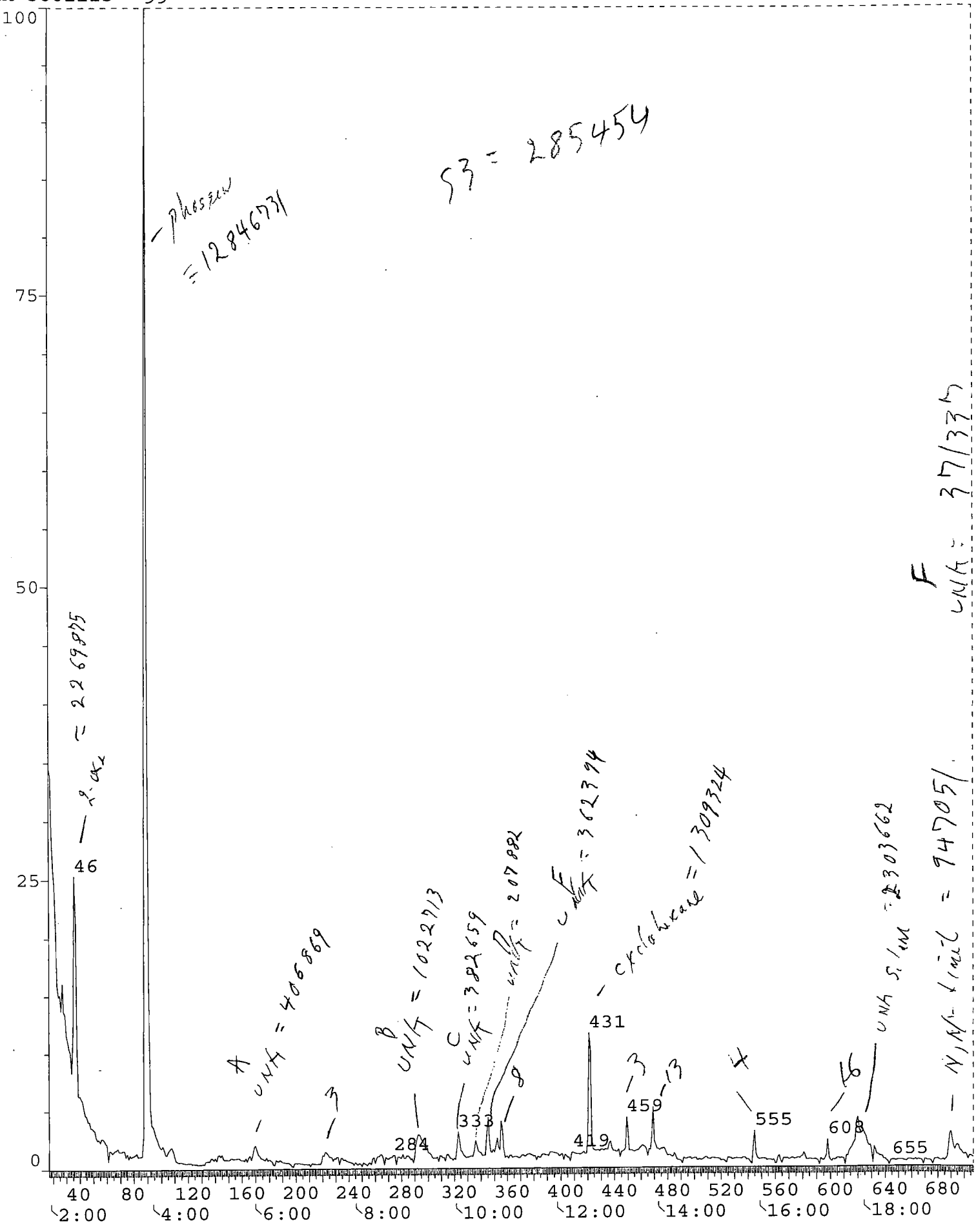
Methane results for samples collected 11/16/04

Sample	Date	Methane, %
Cap Well #1	11/10/04	0.001
Cap Well #2	11/10/04	0.0025
Cap Well #3	11/10/04	< 0.001
Thermal Oxidizer Influent	11/10/04	< 0.001
Thermal Oxidizer Exhaust	11/10/04	0.0024

Chromatogram: c:\ultra98\method\method\04sh84toe24 Scans 27 to 717
Run: 11/18/04 at 14:22:03 RTime 1:57.84 to 20:10.53
04sh84toe24
Max=5861115 99

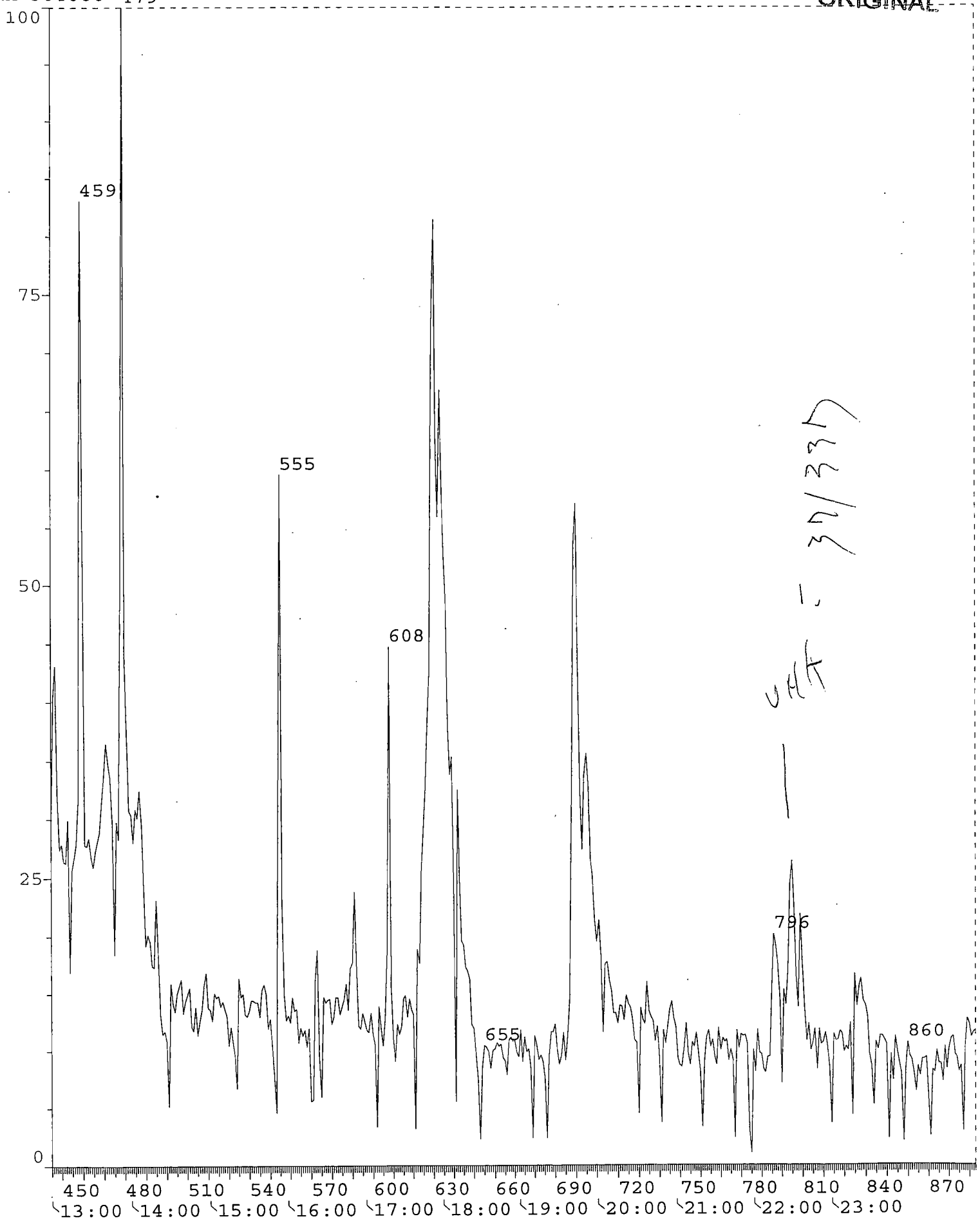
ORIGINAL

TIC



Chromatogram: c:\ultra98\method\method\04sh84toe24 Scans 445 to 893
Run: 11/18/04 at 14:22:03 RTime 12:59.85 to 24:49.05
04sh84toe24
Max=304060 479

ORIGINAL TIC



UHT 1, 37/37

FULL SCAN Quantitation Report

ORIGINAL

Vial #2 : 04sh84toe24
FULL SCAN DATA : C:\ULTRA98\METHOD\method\04sh84toe24
Acquired 11/18/04 at 14:22:03
This Quantitation 11/18/04 at 14:47:37

Peak Search Method : C:\ULTRA98\METHOD\method\03FDVG.lsm
PQUAN Library : C:\ULTRA98\METHOD\method\LIBRARY\03FDVG
Last Calibration 11/18/04 at 12:35:45

Acquisition Method : C:\ULTRA98\METHOD\method\FDVG.fsm
Tune/Cal File : C:\ULTRA98\TUNC\MAN289.tnc
Datafile title:
04sh84toe24

W = RT +- (0:30.00 / 2 + RT * 0.010)
Min Fit=0.850; Min Pur=0.500; Min Area=100
Width= 3-40 scans; Res= 1 scans; NLM=2.0

REC NO.	Target	Pred. RT.	Internal Standard Name
1	130	11:02.65	bromochloromethane
2	65	12:02.74	1,2-dichloroethane-d4
3	114	13:20.68	1,4-difluorobenzene
4	98	15:59.80	toluene-d8
5	117	18:25.90	chlorobenzene-d5
6	95	20:43.87	bromofluorobenzene

	Rec#	Target	ret.tm.	TS	fit	purity	MS	area	ppb	man.	%RFC
*	1	130	Not Found								
*	2	65	Not Found								
	3	114	13:22.04	0.882		0.877		146684	35.00		
	4	98	15:54.08	0.491		0.472		91019	35.00	*	
	5	117	18:19.74	0.816		0.501		1099	35.00	*	
*	6	95	Not Found								

REC NO.	Target	Pred. RT.	Analyte Name
1	50	1:57.19	chloromethane
2	62	2:31.30	vinyl chloride
3	58	6:44.56	acetone
4	45	7:17.18	2-propanol
5	84	8:08.98	methylene chloride
6	61	9:12.25	trans-1,2-dichloroethene
7	63	9:41.53	1,1-dichloroethane
8	72	10:31.84	2-butanone
9	61	10:46.45	cis-1,2-dichloroethene
10	83	11:09.19	chloroform
11	72	11:28.63	tetrahydrofuran
12	78	12:33.61	benzene
13	95	13:53.14	trichloroethene
14	58	15:20.80	4-methyl-2-pentanone
15	91	16:06.28	toluene
16	166	17:24.22	tetrachloroethene
17	112	18:30.79	chlorobenzene
18	91	19:12.97	1,3-dimethylbenzene
19	91	19:53.56	1,2-dimethylbenzene
20	83	20:24.43	1,1,2,2-tetrachloroethane

	Rec#	Target	ret.tm.	TS	fit	purity	MS	area	ppb	man.
*	1	50	Not Found							
*	2	62	Not Found							

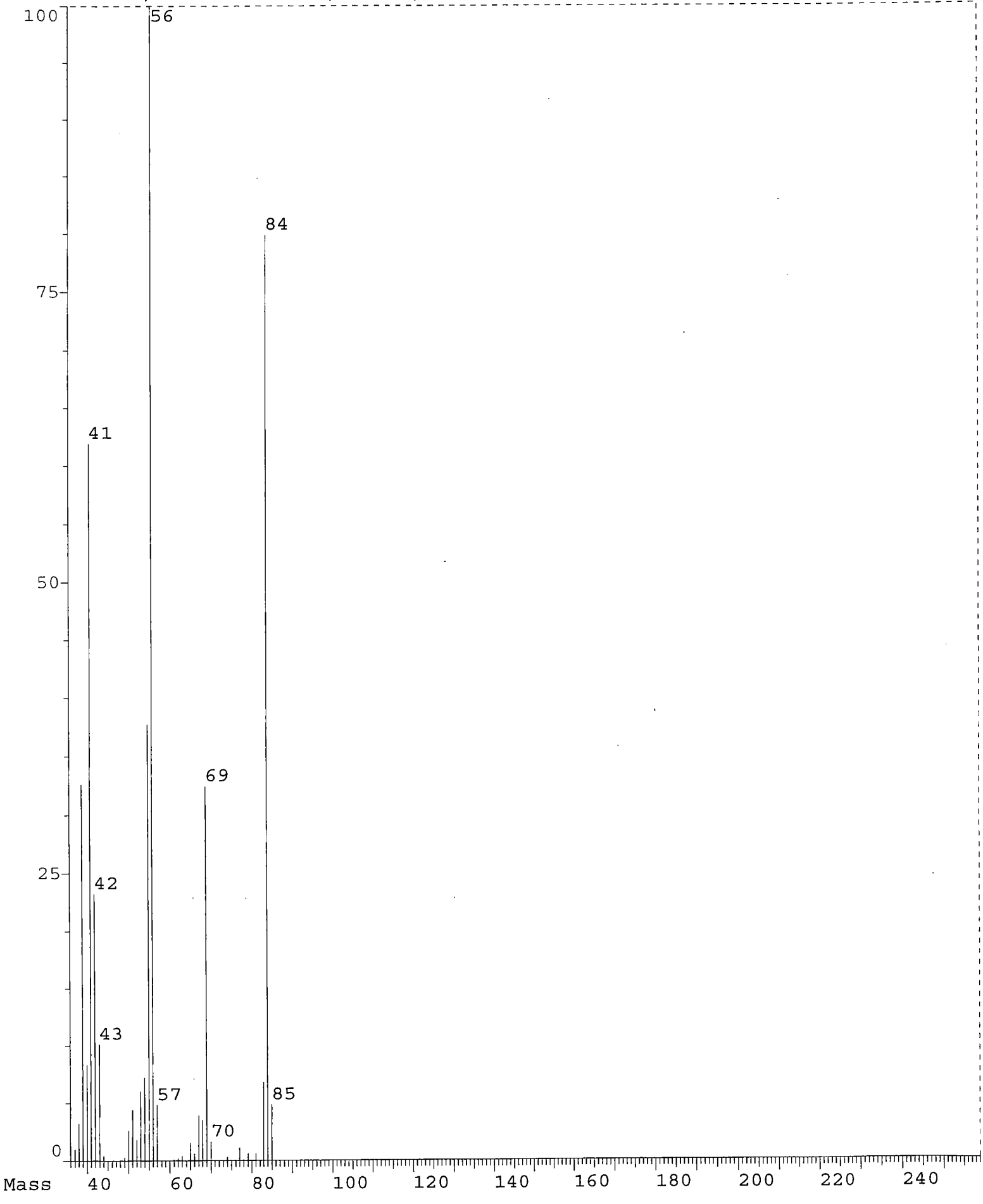
	3	58	7:19.43	0.317	0.069	11476	8.64	*
*	4	45	Not Found					
*	5	84	Not Found					
	6	61	9:10.27	0.568	0.006	309	0.07	*
*	7	63	Not Found					
	8	72	10:53.20	0.169	0.044	56265	79.48	*
*	9	61	Not Found					
	10	83	11:24.89	0.881	0.410	2106	0.48	*
*	11	72	Not Found					
*	12	78	Not Found					
	13	95	13:53.74	0.985	0.980	65172	24.85	
	14	58	15:54.08	0.066	0.038	1660	0.79	*
	15	91	16:00.39	0.895	0.744	1438	0.19	
	16	166	17:18.00	0.949	0.939	33163	9.84	*
*	17	112	Not Found					
	18	91	19:07.20	0.847	0.219	750	0.06	*
	19	91	19:46.74	0.877	0.664	675	0.10	
*	20	83	Not Found					

ORIGINAL

NIST hit #1 of 5; 1.0 m/z; Cyclohexane
NIST hits of S[431] 04SH84TOE24 Run: 11/18/04 at 14:22:03
04sh84toe24

ORIGINAL

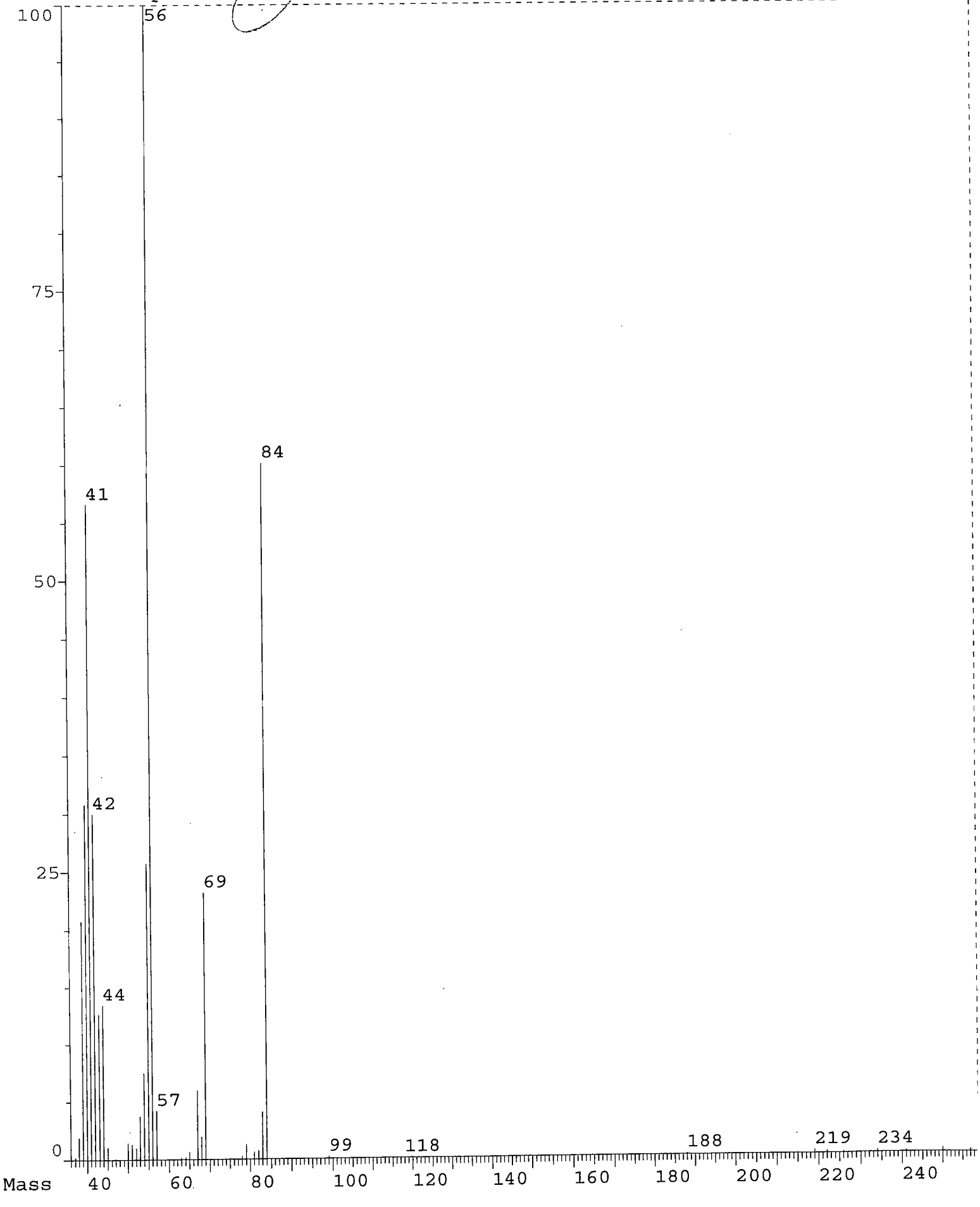
SI=841; Formula=C6H12; MW=84; CAS#=110827; EPA#=118501; DB#=4073



Full Scan c:\ultra98\method\method\04sh84toe24 1.0 m/z; RTime 12
Normalization Mass: 56; Run: 11/18/04 at 14:22:03
04sh84toe24

ORIGINAL

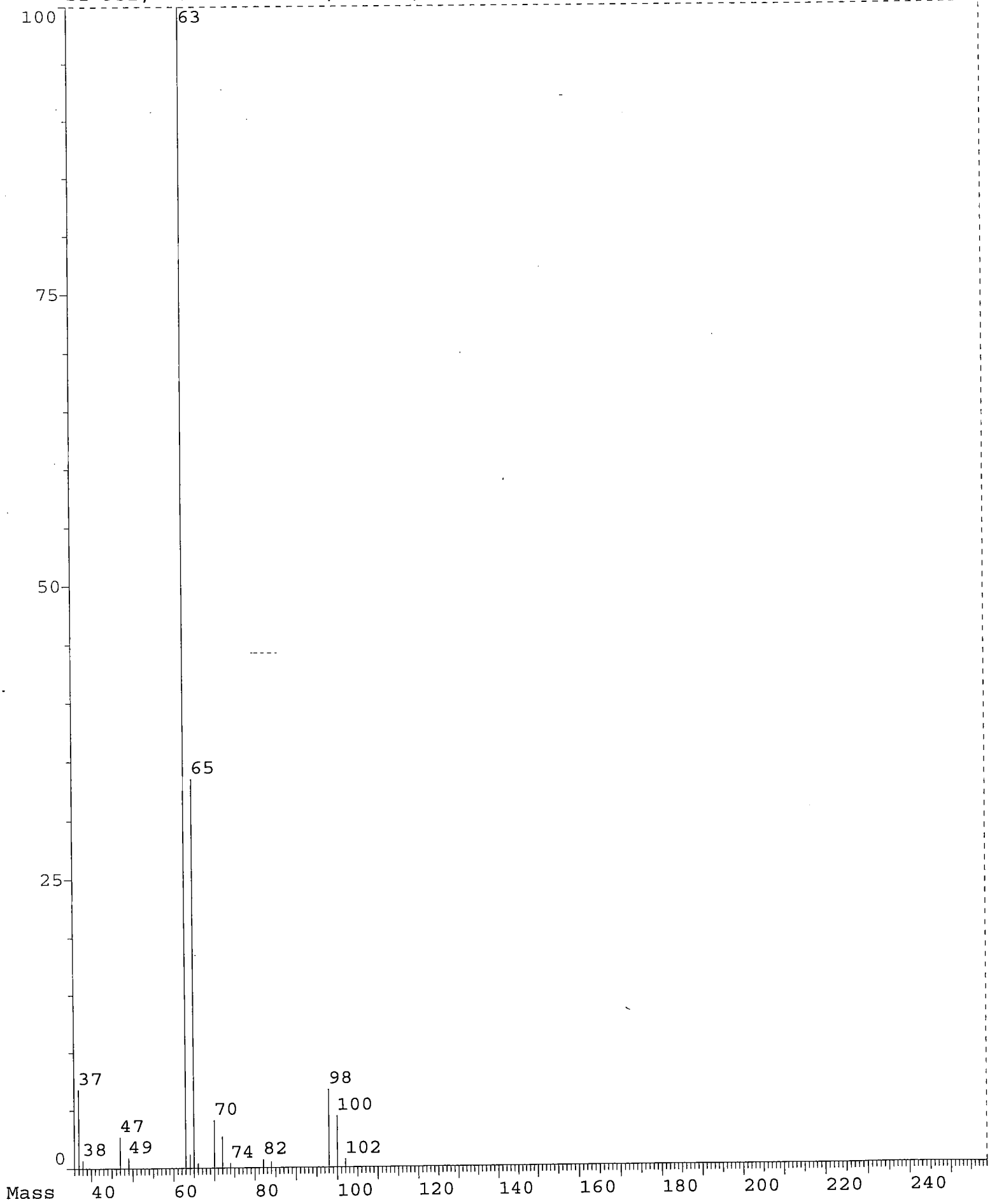
Max=165077 Spectrum 431;



NIST hit #1 of 5; 1.0 m/z; Phosgene
NIST hits of S[99]B[42] 04SH84TOE24 Run: 11/18/04 at 14:22:03
04sh84toe24

ORIGINAL

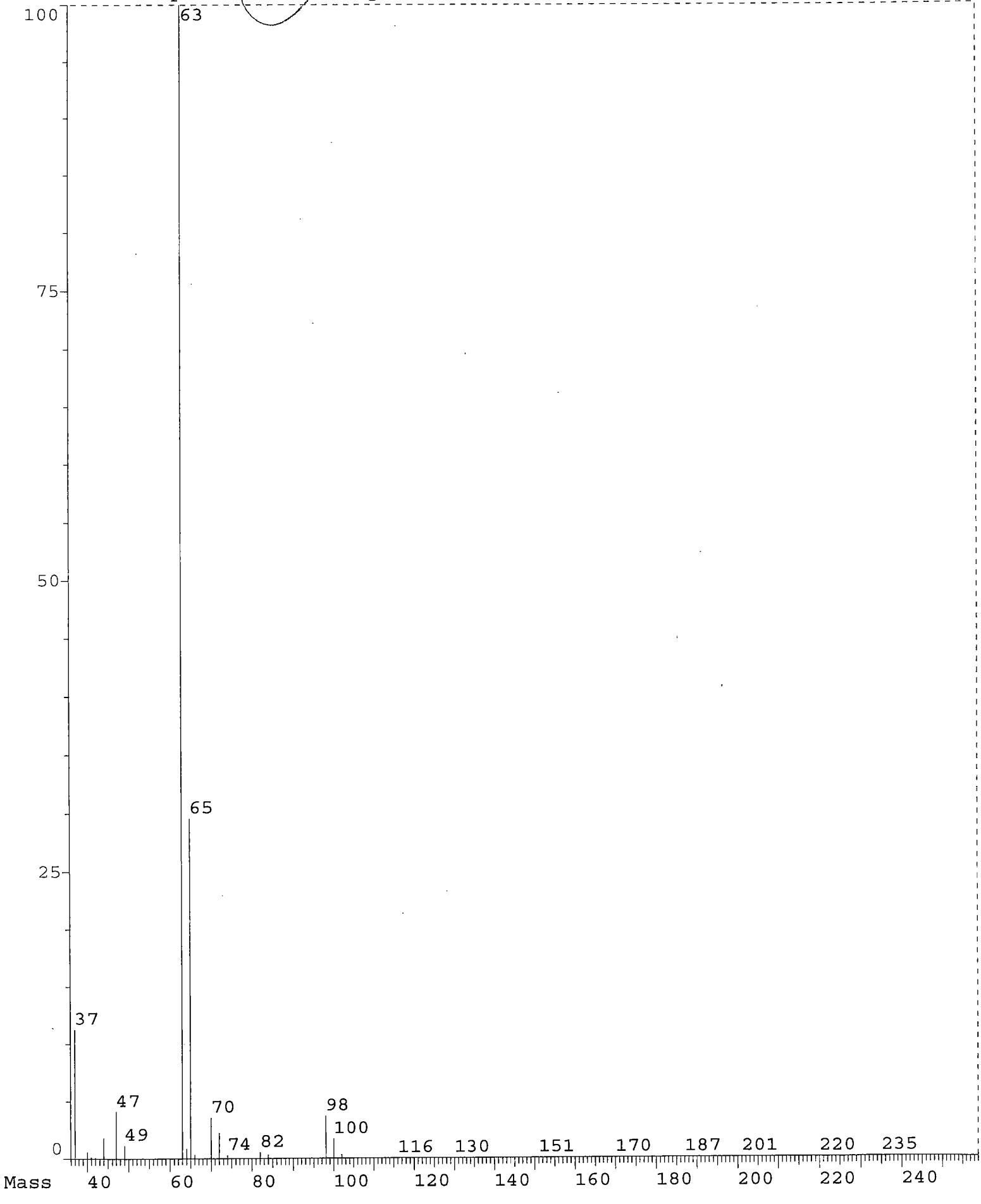
SI=952; Formula=CCl2O; MW=98; CAS#=75445; EPA#=34341; DB#=5660



Full Scan c:\ultra98\method\method\04sh84toe24 1.0 m/z; RTime 3:
Normalization Mass: 63; Run: 11/18/04 at 14:22:03
04sh84toe24

ORIGINAL

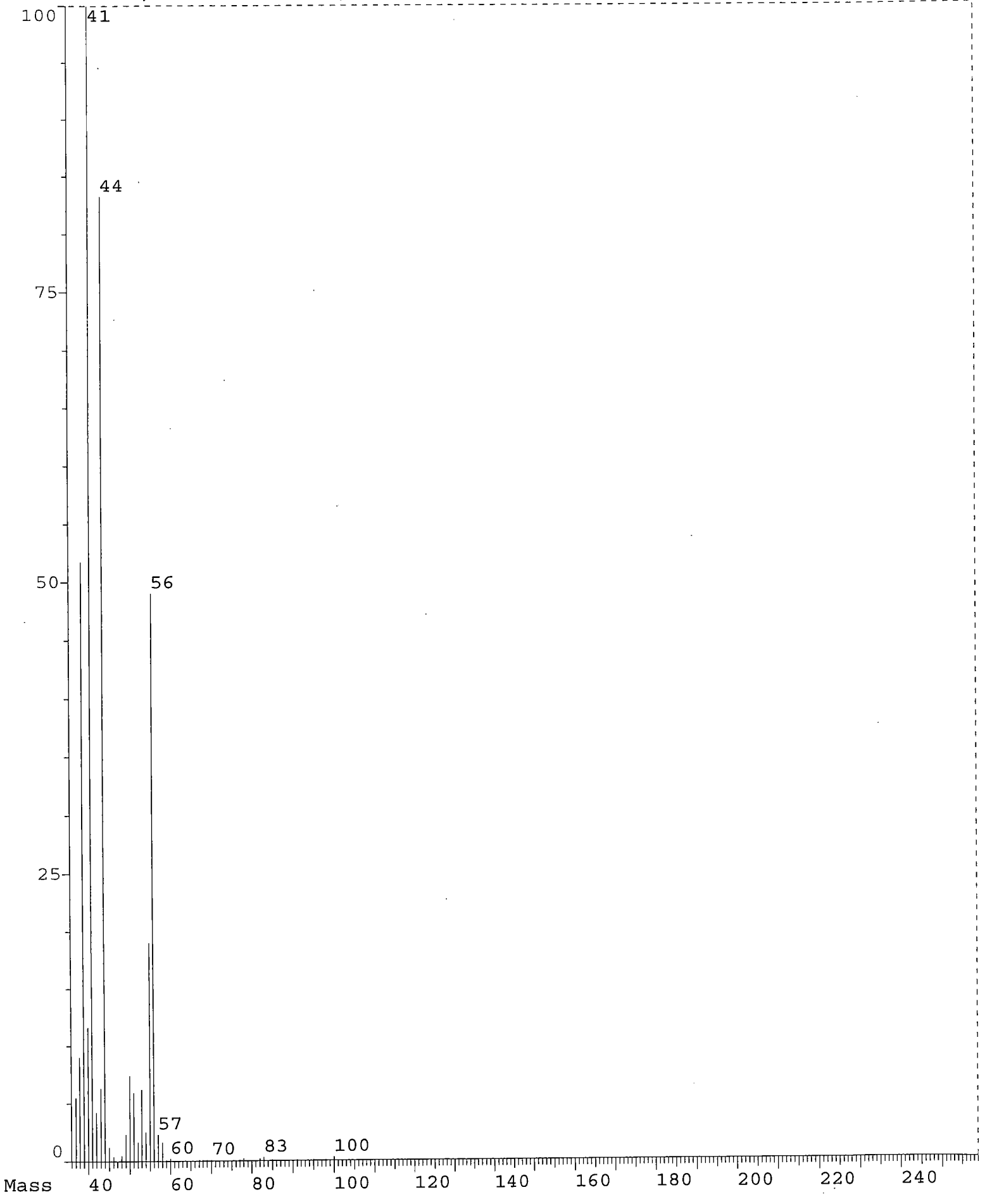
Max=3586900 Spectrum 99; Background 42



NIST hit #1 of 5; 1.0 m/z; 2-Oxetanone, 4,4-dimethyl-
NIST hits of S[46] 04SH84TOE24 Run: 11/18/04 at 14:22:03
04sh84toe24

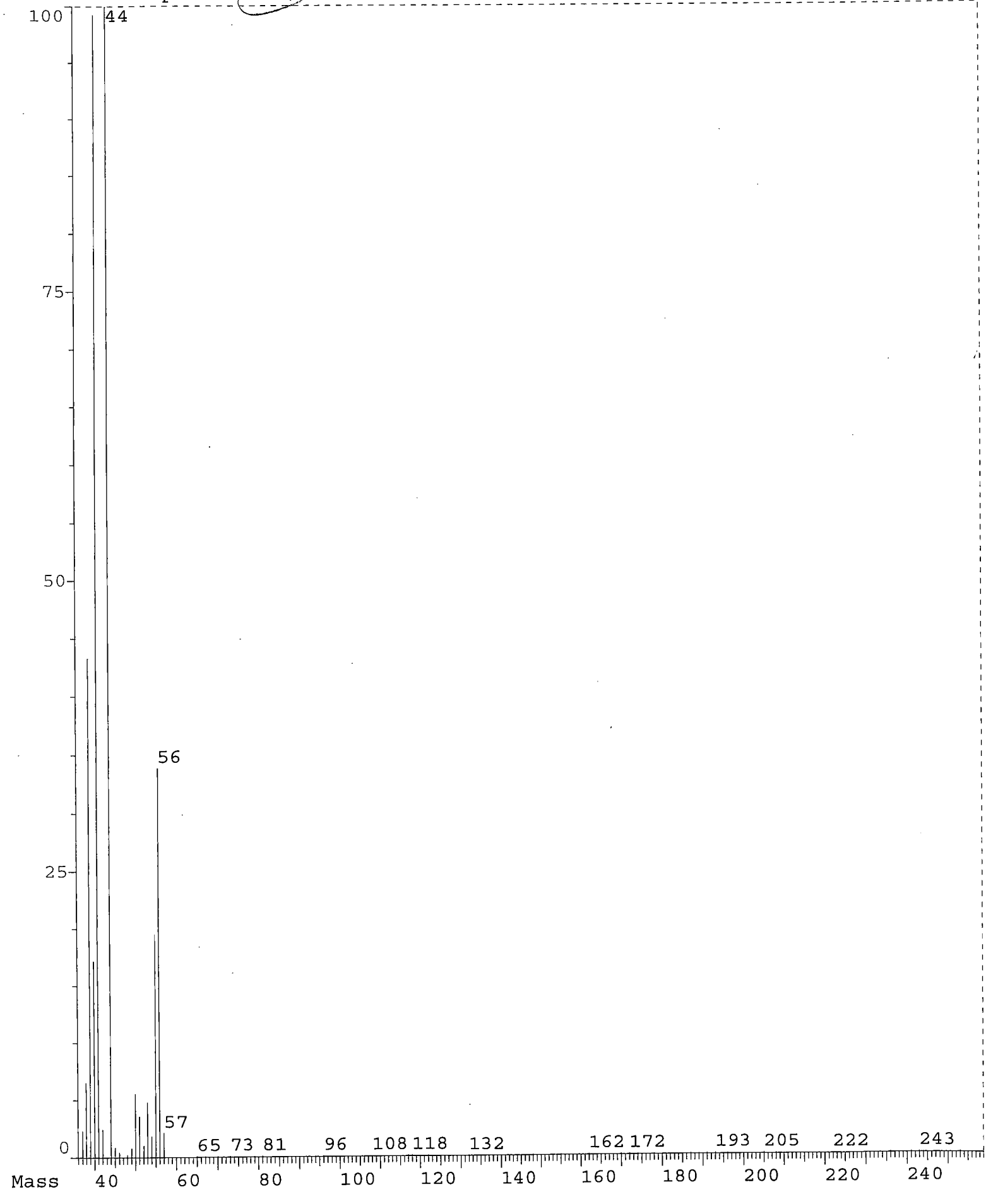
ORIGINAL

SI=880; Formula=C5H8O2; MW=100; CAS#=1823525; EPA#=1113; DB#=1851



Full Scan c:\ultra98\method\method\04sh84toe24 1.0 m/z; RTime 2:
Normalization Mass: 44; Run: 11/18/04 at 14:22:03
04sh84toe24
Max=424616 Spectrum 46;

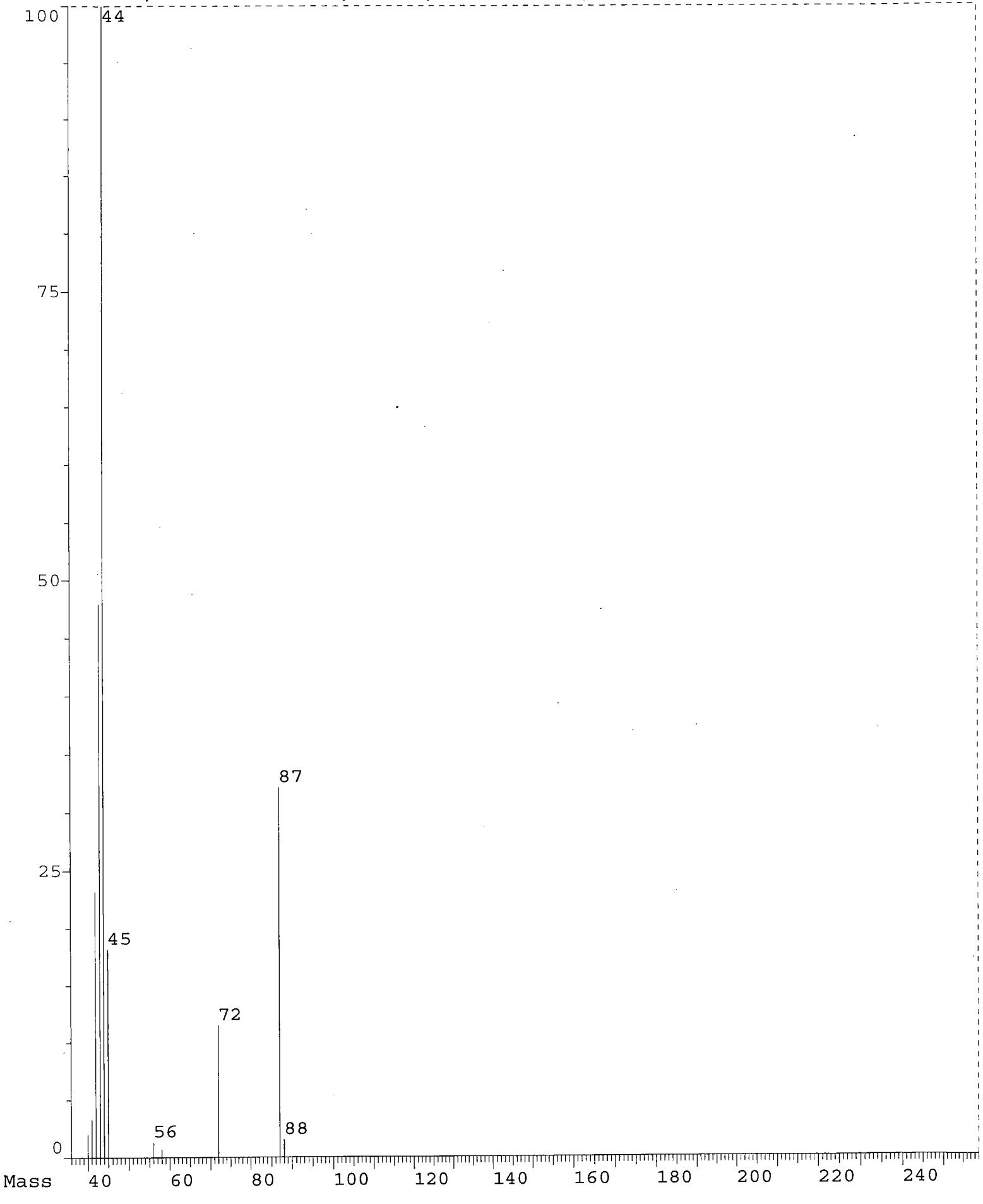
ORIGINAL



NIST hit #1 of 5; 1.0 m/z; Acetamide, N,N-dimethyl-
NIST hits of S[702] 04SH84TOE24 Run: 11/18/04 at 14:22:03
04sh84toe24

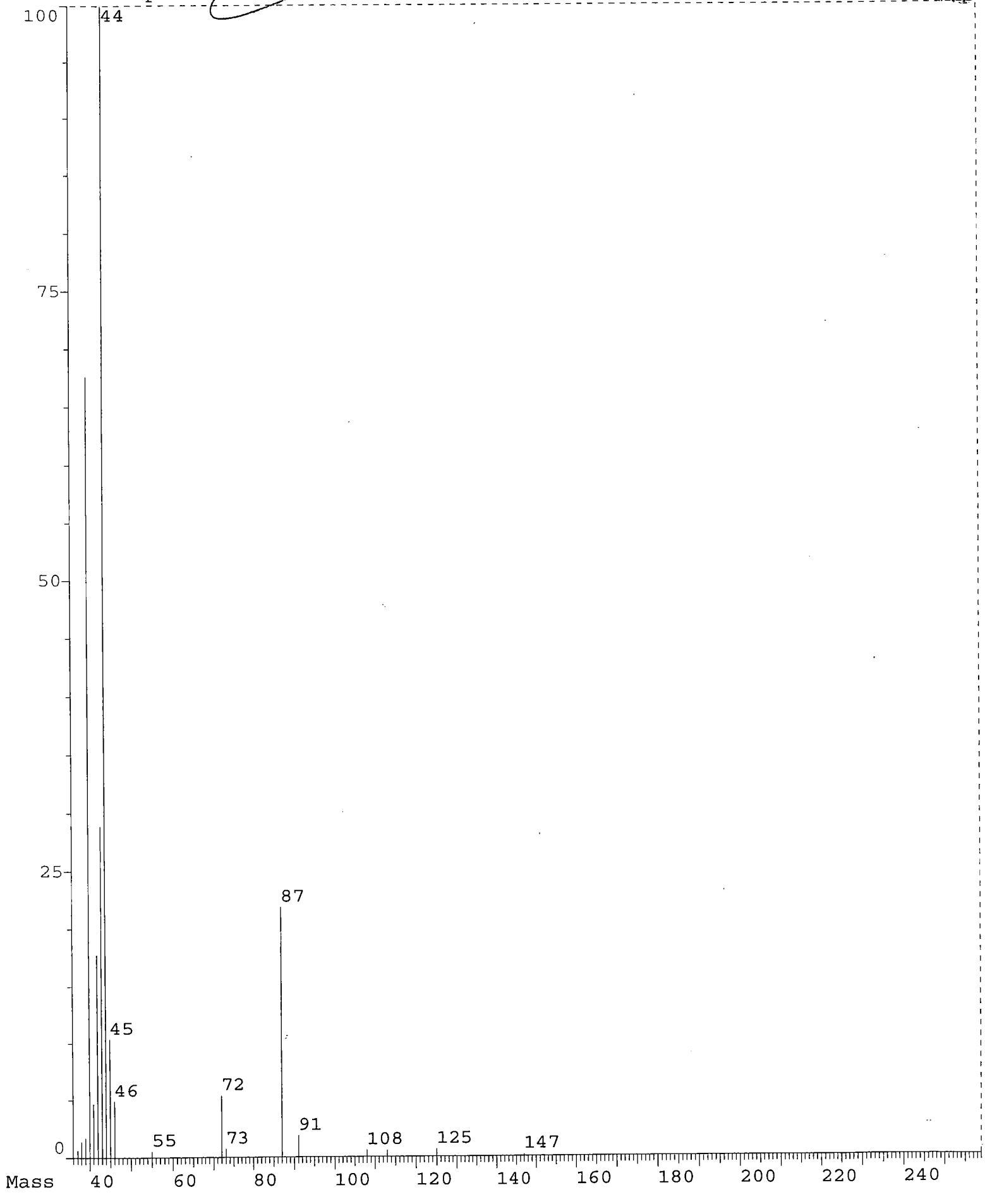
ORIGINAL

SI=726; Formula=C4H9NO; MW=87; CAS#=127195; EPA#=19455; DB#=10619



Full Scan c:\ultra98\method\method\04sh84toe24 1.0 m/z; RTime 19
Normalization Mass: 44; Run: 11/18/04 at 14:22:03
04sh84toe24
Max=36525 Spectrum 702;

ORIGINAL



NIST Forward Search Report

ORIGINAL

Vial #2 : 04sh84toe24
FULL SCAN DATA : C:\ULTRA98\METHOD\method\04sh84toe24
Acquired 11/18/04 at 14:22:03
Peak Search Ran 11/18/04 at 14:47:37

Peak Search Method : C:\ULTRA98\METHOD\method\03FDVG.lsm
Acquisition Method : C:\ULTRA98\METHOD\method\FDVG.fsm
Tune/Cal File : C:\ULTRA98\TUNC\MAN289.tnc
Datafile title:
04sh84toe24

pk#	llim	peak	rlim	ret.tm.	area	%area
1.	1	2	3	1:18.18	46156032	12.178%

1. SI=863; Ethylene oxide
   Formula=C2H4O; MW=44; CAS#=75218; EPA#=18868; DB#=177
2. SI=856; Ethylene oxide
   Formula=C2H4O; MW=44; CAS#=75218; EPA#=18867; DB#=106
3. SI=849; 1,4-Dioxane-2,6-dione
   Formula=C4H4O4; MW=116; CAS#=4480835; EPA#=1991; DB#=3375
4. SI=829; Cyclopropyl carbinol
   Formula=C4H8O; MW=72; CAS#=2516338; EPA#=192479; DB#=2639
5. SI=818; Acetic acid, oxo-
   Formula=C2H2O3; MW=74; CAS#=298124; EPA#=356; DB#=65

pk#	llim	peak	rlim	ret.tm.	area	%area
2.	3	4	6	1:21.37	80511840	21.242%

1. SI=867; Ethylene oxide
   Formula=C2H4O; MW=44; CAS#=75218; EPA#=18868; DB#=177
2. SI=860; Ethylene oxide
   Formula=C2H4O; MW=44; CAS#=75218; EPA#=18867; DB#=106
3. SI=853; 1,4-Dioxane-2,6-dione
   Formula=C4H4O4; MW=116; CAS#=4480835; EPA#=1991; DB#=3375
4. SI=833; Cyclopropyl carbinol
   Formula=C4H8O; MW=72; CAS#=2516338; EPA#=192479; DB#=2639
5. SI=817; Cyclobutanol
   Formula=C4H8O; MW=72; CAS#=2919235; EPA#=290; DB#=2646

pk#	llim	peak	rlim	ret.tm.	area	%area
3.	6	7	8	1:26.15	54931304	14.493%

1. SI=913; Ethylene oxide
   Formula=C2H4O; MW=44; CAS#=75218; EPA#=18868; DB#=177
2. SI=911; 1,4-Dioxane-2,6-dione
   Formula=C4H4O4; MW=116; CAS#=4480835; EPA#=1991; DB#=3375
3. SI=889; Alanine
   Formula=C3H7NO2; MW=89; CAS#=56417; EPA#=30598; DB#=10455
4. SI=885; Cyclopropyl carbinol
   Formula=C4H8O; MW=72; CAS#=2516338; EPA#=192479; DB#=2639
5. SI=853; dl-Alanine
   Formula=C3H7NO2; MW=89; CAS#=302727; EPA#=220801; DB#=2588

pk#	llim	peak	rlim	ret.tm.	area	%area
4.	8	9	12	1:29.28	76203328	20.105%

1. SI=849; Acetic acid, [(aminocarbonyl)amino]oxo-
   Formula=C3H4N2O4; MW=132; CAS#=585057; EPA#=36977; DB#=10475
2. SI=848; Ethylene oxide
   Formula=C2H4O; MW=44; CAS#=75218; EPA#=18868; DB#=177
3. SI=832; 1,4-Dioxane-2,6-dione
   Formula=C4H4O4; MW=116; CAS#=4480835; EPA#=1991; DB#=3375
4. SI=819; Alanine
   Formula=C3H7NO2; MW=89; CAS#=56417; EPA#=30598; DB#=10455
5. SI=816; Acetic acid, oxo-
   Formula=C2H2O3; MW=74; CAS#=298124; EPA#=356; DB#=65

pk#	llim	peak	rlim	ret.tm.	area	%area
5.	20	22	36	1:49.93	32239652	8.506%

1. SI=996; Carbon dioxide
   Formula=CO2; MW=44; CAS#=124389; EPA#=69; DB#=2584
2. SI=979; Carbamic acid, monoammonium salt

Formula=CH6N2O2; MW=78; CAS#=1111780; EPA#=230098; DB#=10454

3. SI=979; Carbon dioxide
   Formula=CO2; MW=44; CAS#=124389; EPA#=18873; DB#=10466
4. SI=978; Carbamic acid, monoammonium salt
   Formula=CH6N2O2; MW=78; CAS#=1111780; EPA#=406; DB#=17
5. SI=957; Propiolic acid
   Formula=C3H2O2; MW=70; CAS#=471250; EPA#=190053; DB#=10464

ORIGINAL

TOE 24 S3 = 285454 Page 1

ORIGINAL

2-oxo

$$\frac{35}{285454} = \frac{x}{2269875} \qquad x = 278.3$$

Phosgene

$$\frac{35}{285454} = \frac{x}{12846731} \qquad x = 1575.2$$

UNKA

$$= \frac{x}{406867} \qquad x = 49.9$$

UNK B

$$= \frac{x}{1022713} \qquad = 125.4$$

UNK C

$$= \frac{x}{382659} \qquad = 46.9$$

UNK D

$$= \frac{x}{207882} \qquad = 25.5$$

TOE 24

UNIT E

page 2

ORIGINAL

$$\frac{35}{285454} = \frac{x}{362394} \qquad x = 44.4$$

cyclohexane

$$= \frac{x}{1309324} \qquad x = 160.5$$

UNIT 5/6W

$$= \frac{x}{2303662} \qquad x = 282.4$$

N, N-dimethyl

$$= \frac{x}{947651} \qquad x = 116.1$$

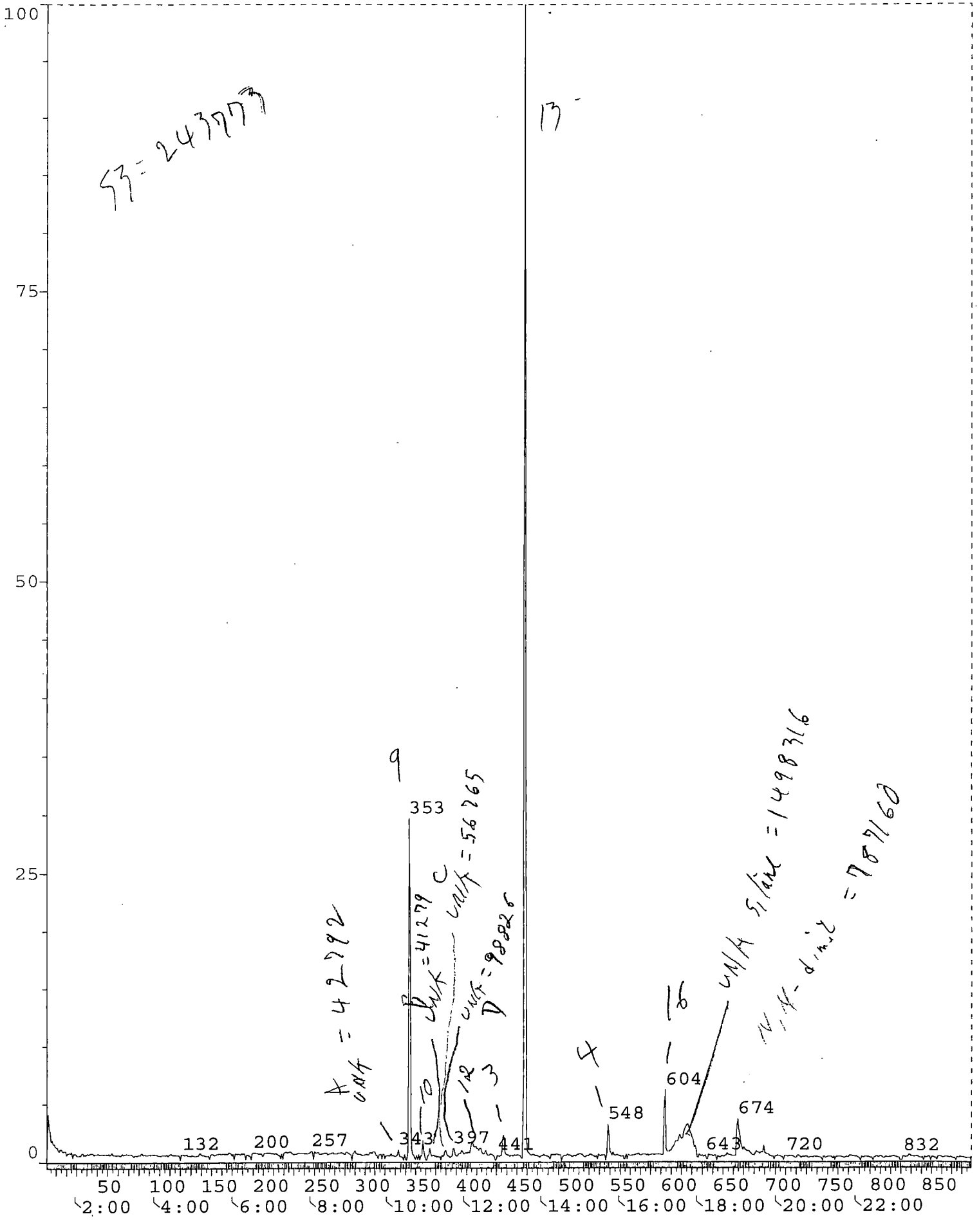
UNIT F

$$= \frac{x}{371337} \qquad x = 45.5$$

Chromatogram: c:\ultra98\method\method\04sh84tobi23 Scans 1 to 899
Run: 11/18/04 at 15:17:53 RTime 1:16.53 to 24:58.72
04sh84tobi23

ORIGINAL

Max=6963064 TIC



FULL SCAN Quantitation Report

ORIGINAL

Vial #2 : 04sh84tobi23
FULL SCAN DATA : C:\ULTRA98\METHOD\method\04sh84tobi23
Acquired 11/18/04 at 15:17:53
This Quantitation 11/18/04 at 15:43:26

Peak Search Method : C:\ULTRA98\METHOD\method\03FDVG.lsm
PQUAN Library : C:\ULTRA98\METHOD\method\LIBRARY\03FDVG
Last Calibration 11/18/04 at 12:35:45

Acquisition Method : C:\ULTRA98\METHOD\method\FDVG.fsm
Tune/Cal File : C:\ULTRA98\TUNC\MAN289.tnc
Datafile title:
04sh84tobi23

W = RT +- (0:30.00 / 2 + RT * 0.010)
Min Fit=0.850; Min Pur=0.500; Min Area=100
Width= 3-40 scans; Res= 1 scans; NLM=2.0

REC NO.	Target	Pred. RT.	Internal Standard Name
1	130	11:02.65	bromochloromethane
2	65	12:02.74	1,2-dichloroethane-d4
3	114	13:20.68	1,4-difluorobenzene
4	98	15:59.80	toluene-d8
5	117	18:25.90	chlorobenzene-d5
6	95	20:43.87	bromofluorobenzene

	Rec#	Target	ret.tm.	TS	fit	purity	MS	area	ppb	man.	%RFC
*	1	130	Not Found								
*	2	65	Not Found								
	3	114	13:01.50		0.883	0.882		141107	35.00		
	4	98	15:43.04		0.483	0.481		125685	35.00	*	
*	5	117	Not Found								
*	6	95	Not Found								

REC NO.	Target	Pred. RT.	Analyte Name
1	50	1:57.19	chloromethane
2	62	2:31.30	vinyl chloride
3	58	6:44.56	acetone
4	45	7:17.18	2-propanol
5	84	8:08.98	methylene chloride
6	61	9:12.25	trans-1,2-dichloroethene
7	63	9:41.53	1,1-dichloroethane
8	72	10:31.84	2-butanone
9	61	10:46.45	cis-1,2-dichloroethene
10	83	11:09.19	chloroform
11	72	11:28.63	tetrahydrofuran
12	78	12:33.61	benzene
13	95	13:53.14	trichloroethene
14	58	15:20.80	4-methyl-2-pentanone
15	91	16:06.28	toluene
16	166	17:24.22	tetrachloroethene
17	112	18:30.79	chlorobenzene
18	91	19:12.97	1,3-dimethylbenzene
19	91	19:53.56	1,2-dimethylbenzene
20	83	20:24.43	1,1,2,2-tetrachloroethane

	Rec#	Target	ret.tm.	TS	fit	purity	MS	area	ppb	man.
*	1	50	Not Found							
	2	62	2:24.75		0.734	0.547		24365	14.11	*

ORIGINAL

*	3	58	Not Found					
*	4	45	Not Found					
	5	84	8:02.16	0.239	0.155	2150	1.00	*
	6	61	9:03.89	0.761	0.527	1456	0.36	*
	7	63	9:33.99	0.905	0.605	6832	1.51	
	8	72	10:34.19	0.095	0.003	3254	4.78	*
	9	61	10:35.73	0.983	0.982	1277192	377.97	*
	10	83	10:56.33	0.933	0.911	59619	14.13	
	11	72	11:18.52	0.119	0.035	247	0.32	*
	12	78	12:13.99	0.785	0.646	13245	1.54	*
	13	95	13:34.79	0.975	0.969	1883921	746.64	
*	14	58	Not Found					
	15	91	15:50.95	0.932	0.858	9532	1.29	
	16	166	17:11.74	0.966	0.894	131191	40.45	*
	17	112	18:18.31	0.720	0.028	1177	0.23	*
	18	91	19:02.64	0.740	0.184	26170	2.29	*
	19	91	19:42.18	0.954	0.943	23662	3.50	
*	20	83	Not Found					

NIST Forward Search Report

ORIGINAL

Vial #2 : 04sh84tobi23
FULL SCAN DATA : C:\ULTRA98\METHOD\method\04sh84tobi23
Acquired 11/18/04 at 15:17:53
Peak Search Ran 11/18/04 at 15:43:26

Peak Search Method : C:\ULTRA98\METHOD\method\03FDVG.lsm
Acquisition Method : C:\ULTRA98\METHOD\method\FDVG.fsm
Tune/Cal File : C:\ULTRA98\TUNC\MAN289.tnc
Datafile title:
04sh84tobi23

pk#	llim	peak	rlim	ret.tm.	area	%area
1.	1	2	13	1:18.13	992602	4.595%

1. SI=307; 2(1H)-Naphthalenone, 3,4,4a,5,6,7-hexahydro-4a-[(methylamino)m
   Formula=C14H23NO2; MW=237; CAS#=0; EPA#=197087; DB#=11325
2. SI=287; Butanoic acid, (3RS)-4-[(t-butoxycarbonyl-(S)-alanyl)amino]-3-
   Formula=C15H28N2O5; MW=316; CAS#=0; EPA#=161704; DB#=10813
3. SI=260; 6-Methyl-2-(3-nitrophenyl)imidazo[1,2-a]pyridine
   Formula=C14H11N3O2; MW=253; CAS#=0; EPA#=224304; DB#=93499
4. SI=244; Pregnane-3,20-diamine, (3á,5à,20S)-
   Formula=C21H38N2; MW=318; CAS#=7050251; EPA#=15000; DB#=11379
5. SI=236; 6H-Dibenz[b,f]oxireno[d]azepine-6-carboxamide, 1a,10b-dihydro-
   Formula=C15H12N2O2; MW=252; CAS#=36507309; EPA#=246450; DB#=17486

2.	351	353	360	10:34.19	3934514	18.213%

1. SI=923; Ethene, 1,2-dichloro-, (E)-
   Formula=C2H2Cl2; MW=96; CAS#=156605; EPA#=890; DB#=5614
2. SI=923; Ethene, 1,2-dichloro-, (Z)-
   Formula=C2H2Cl2; MW=96; CAS#=156592; EPA#=107701; DB#=10374
3. SI=920; Ethene, 1,2-dichloro-, (E)-
   Formula=C2H2Cl2; MW=96; CAS#=156605; EPA#=107702; DB#=20408
4. SI=920; Ethene, 1,2-dichloro-, (E)-
   Formula=C2H2Cl2; MW=96; CAS#=156605; EPA#=114913; DB#=5616
5. SI=912; Ethene, 1,2-dichloro-, (Z)-
   Formula=C2H2Cl2; MW=96; CAS#=156592; EPA#=19680; DB#=5610

3.	608	618	620	17:33.93	746008	3.453%

1. SI=556; Cyclopropene, 3,3-diphenyl-1-trimethylsilyl-
   Formula=C18H20Si; MW=264; CAS#=0; EPA#=160856; DB#=25532
2. SI=550; Spiro[2.4]hept-5-ene, 5-trimethylsilylmethyl-1-trimethylsilyl-
   Formula=C14H28Si2; MW=252; CAS#=0; EPA#=153969; DB#=25894
3. SI=518; Silane, [2-[9,10-dihydro-10-(trimethylsilyl)-9-anthracenyl]eth
   Formula=C22H32Si2; MW=352; CAS#=110551741; EPA#=153868; DB#=27599
4. SI=510; Silane, [thiobis(methylene)]bis[thiomethyl-
   Formula=C8H22SSi2; MW=206; CAS#=4712510; EPA#=136511; DB#=25487
5. SI=483; Anthracene, 9-ethyl-9,10-dihydro-10-trimethylsilyl-
   Formula=C19H24Si; MW=280; CAS#=0; EPA#=154580; DB#=27172

4.	620	626	636	17:46.62	1868678	8.650%

1. SI=548; Tetrasiloxane, decamethyl-
   Formula=C10H30O3Si4; MW=310; CAS#=141628; EPA#=63552; DB#=27371
2. SI=513; 1,4-Cyclohexadiene, 1,3,6-tris(trimethylsilyl)-
   Formula=C15H32Si3; MW=296; CAS#=0; EPA#=150108; DB#=26726
3. SI=501; Anthracene, 9-ethyl-9,10-dihydro-10-trimethylsilyl-
   Formula=C19H24Si; MW=280; CAS#=0; EPA#=154580; DB#=27172
4. SI=500; Silane, (2-ethyl-5,5-dimethyl-4-methylene-1-cyclopenten-1-yl)t
   Formula=C13H24Si; MW=208; CAS#=95798053; EPA#=152281; DB#=25758
5. SI=481; Silane, (2-ethyl-3,3-dimethyl-4-methylene-1-cyclopenten-1-yl)t
   Formula=C13H24Si; MW=208; CAS#=95798133; EPA#=152280; DB#=27269

5.	672	674	679	19:02.64	698138	3.232%

1. SI=768; Acetamide, N,N-dimethyl-
   Formula=C4H9NO; MW=87; CAS#=127195; EPA#=19455; DB#=10619
2. SI=740; Acetamide, N,N-dimethyl-

Formula=C4H9NO; MW=87; CAS#=127195; EPA#=164020; DB#=2741

3. SI=693; Acetamide, N,N-dimethyl-
   Formula=C4H9NO; MW=87; CAS#=127195; EPA#=640; DB#=2659
4. SI=688; Guanidine, N,N-dimethyl-
   Formula=C3H9N3; MW=87; CAS#=6145422; EPA#=645; DB#=11030
5. SI=624; Acetamide, N-ethyl-
   Formula=C4H9NO; MW=87; CAS#=625503; EPA#=639; DB#=891

ORIGINAL

04TORF 23

53 = 243773

ORIGINAL

UNIT A

$$\frac{35}{243773} = \frac{x}{42792} \qquad x = 6.1$$

UNIT B

$$= \frac{x}{41279} \qquad = 5.9$$

UNIT C

$$= \frac{x}{56765} \qquad = 8.2$$

UNIT D

$$= \frac{x}{98826} \qquad = 14.2$$

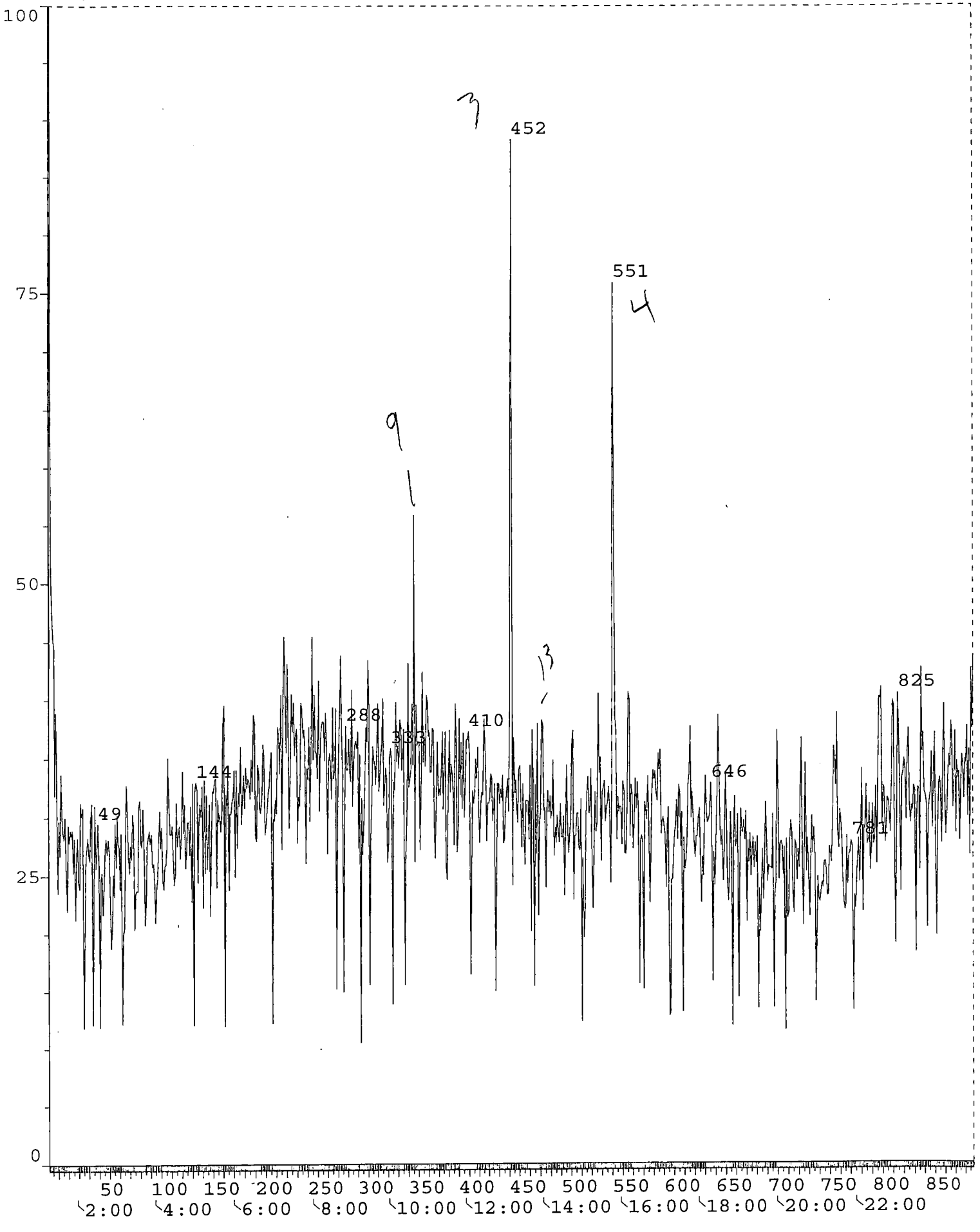
Silica

$$= \frac{x}{1498316} \qquad = 215.1$$

N, N-Lint

$$= \frac{x}{787160} \qquad = 113.0$$

Chromatogram: c:\ultra98\method\method\04sh84ex120 Scans 1 to 898
Run: 11/17/04 at 15:57:32 RTime 1:16.53 to 24:59.16
04SH84EX120
Max=212182 ORIGINAL TIC



FULL SCAN Quantitation Report

Vial #2 : 04SH84EX120
FULL SCAN DATA : C:\ULTRA98\METHOD\method\04sh84EX120
Acquired 11/17/04 at 15:57:32
This Quantitation 11/17/04 at 16:23:04

ORIGINAL

Peak Search Method : C:\ULTRA98\METHOD\method\03FDVG.lsm
PQUAN Library : C:\ULTRA98\METHOD\method\LIBRARY\03FDVG
Last Calibration 11/17/04 at 15:42:25

Acquisition Method : C:\ULTRA98\METHOD\method\FDVG.fsm
Tune/Cal File : C:\ULTRA98\TUNC\MAN289.tnc
Datafile title:
04SH84EX120

W = RT +- (0:30.00 / 2 + RT * 0.010)
Min Fit=0.850; Min Pur=0.500; Min Area=100
Width= 3-40 scans; Res= 1 scans; NLM=2.0

REC NO.	Target	Pred. RT.	Internal Standard Name
1	130	11:02.65	bromochloromethane
2	65	12:02.74	1,2-dichloroethane-d4
3	114	13:20.68	1,4-difluorobenzene
4	98	15:59.80	toluene-d8
5	117	18:25.90	chlorobenzene-d5
6	95	20:43.87	bromofluorobenzene

	Rec#	Target	ret.tm.	TS	fit	purity	MS	area	ppb	man.	%RFC
*	1	130	Not Found								
*	2	65	Not Found								
	3	114	13:11.72	0.898		0.888		104871	35.00		
	4	98	15:48.70	0.483		0.477		83200	35.00	*	
*	5	117	Not Found								
*	6	95	Not Found								

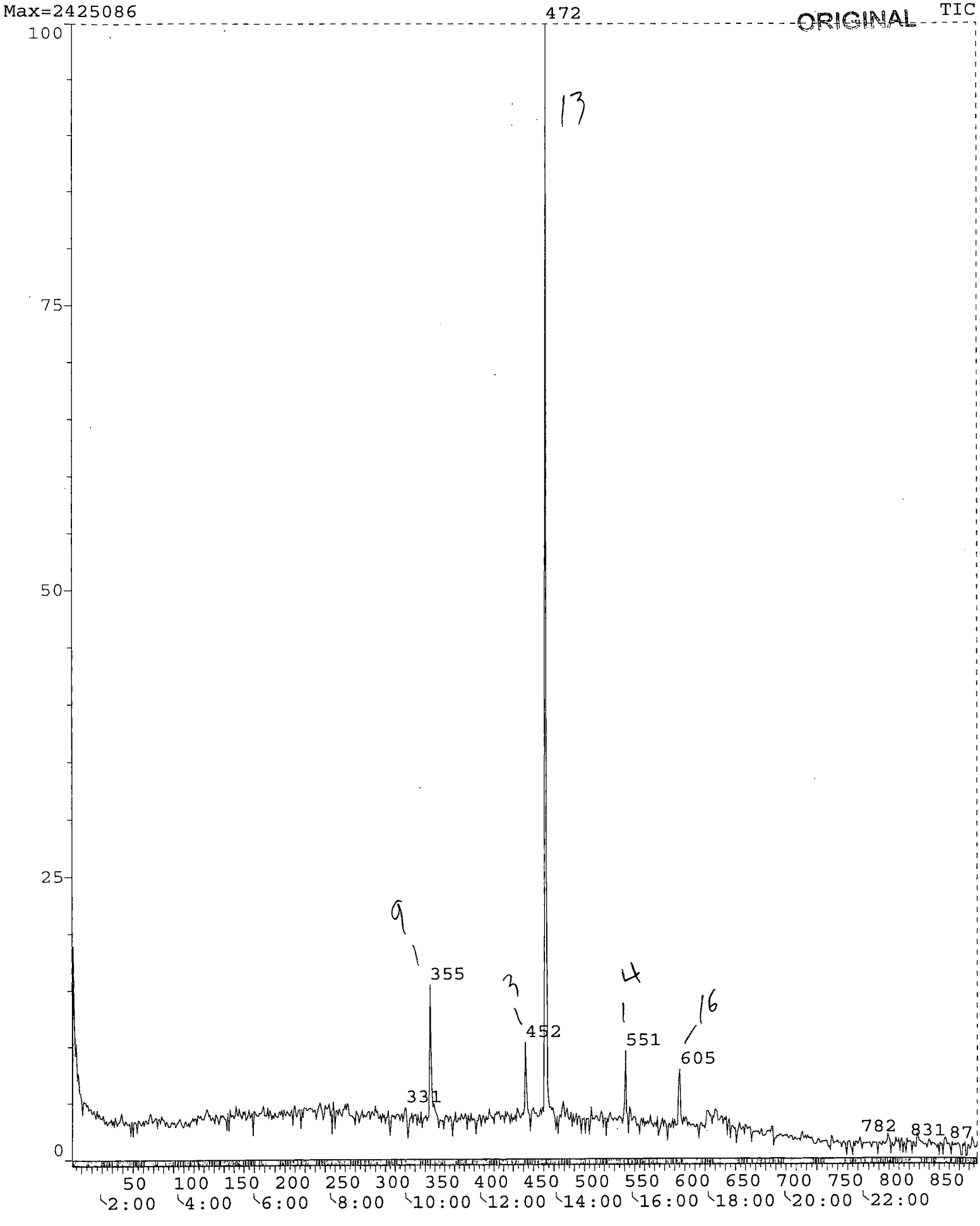
REC NO.	Target	Pred. RT.	Analyte Name
1	50	1:57.19	chloromethane
2	62	2:31.30	vinyl chloride
3	58	6:44.56	acetone
4	45	7:17.18	2-propanol
5	84	8:08.98	methylene chloride
6	61	9:12.25	trans-1,2-dichloroethene
7	63	9:41.53	1,1-dichloroethane
8	72	10:31.84	2-butanone
9	61	10:46.45	cis-1,2-dichloroethene
10	83	11:09.19	chloroform
11	72	11:28.63	tetrahydrofuran
12	78	12:33.61	benzene
13	95	13:53.14	trichloroethene
14	58	15:20.80	4-methyl-2-pentanone
15	91	16:06.28	toluene
16	166	17:24.22	tetrachloroethene
17	112	18:30.79	chlorobenzene
18	91	19:12.97	1,3-dimethylbenzene
19	91	19:53.56	1,2-dimethylbenzene
20	83	20:24.43	1,1,2,2-tetrachloroethane

	Rec#	Target	ret.tm.	TS	fit	purity	MS	area	ppb	man.
*	1	50	Not Found							
*	2	62	Not Found							

ORIGINAL

*	3	58	Not Found				
*	4	45	Not Found				
*	5	84	Not Found				
*	6	61	Not Found				
*	7	63	Not Found				
*	8	72	Not Found				
	9	61	10:39.47	0.979	0.965	36297	16.89
*	10	83	Not Found				
*	11	72	Not Found				
*	12	78	Not Found				
	13	95	13:45.00	0.938	0.885	9373	3.70
*	14	58	Not Found				
*	15	91	Not Found				
*	16	166	Not Found				
*	17	112	Not Found				
*	18	91	Not Found				
*	19	91	Not Found				
*	20	83	Not Found				

Chromatogram: c:\ultra98\method\method\04sh84ex322 Scans 1 to 898
Run: 11/17/04 at 17:10:08 RTime 1:16.59 to 25:00.09
04SH84EX322



FULL SCAN Quantitation Report

ORIGINAL

Vial #2 : 04SH84EX322
FULL SCAN DATA : C:\ULTRA98\METHOD\method\04sh84EX322
Acquired 11/17/04 at 17:10:08
This Quantitation 11/17/04 at 17:35:37

Peak Search Method : C:\ULTRA98\METHOD\method\03FDVG.lsm
PQUAN Library : C:\ULTRA98\METHOD\method\LIBRARY\03FDVG
Last Calibration 11/17/04 at 15:42:25

Acquisition Method : C:\ULTRA98\METHOD\method\FDVG.fsm
Tune/Cal File : C:\ULTRA98\TUNC\MAN289.tnc
Datafile title:
04SH84EX322

W = RT +- (0:30.00 / 2 + RT * 0.010)
Min Fit=0.850; Min Pur=0.500; Min Area=100
Width= 3-40 scans; Res= 1 scans; NLM=2.0

REC NO.	Target	Pred. RT.	Internal Standard Name
1	130	11:02.65	bromochloromethane
2	65	12:02.74	1,2-dichloroethane-d4
3	114	13:20.68	1,4-difluorobenzene
4	98	15:59.80	toluene-d8
5	117	18:25.90	chlorobenzene-d5
6	95	20:43.87	bromofluorobenzene

	Rec#	Target	ret.tm.	TS	fit	purity	MS	area	ppb	man.	%RFC
*	1	130	Not Found								
*	2	65	Not Found								
	3	114	13:12.87	0.899		0.888		127076	35.00		
	4	98	15:50.18	0.472		0.460		84055	35.00	*	
*	5	117	Not Found								
*	6	95	Not Found								

REC NO.	Target	Pred. RT.	Analyte Name
1	50	1:57.19	chloromethane
2	62	2:31.30	vinyl chloride
3	58	6:44.56	acetone
4	45	7:17.18	2-propanol
5	84	8:08.98	methylene chloride
6	61	9:12.25	trans-1,2-dichloroethene
7	63	9:41.53	1,1-dichloroethane
8	72	10:31.84	2-butanone
9	61	10:46.45	cis-1,2-dichloroethene
10	83	11:09.19	chloroform
11	72	11:28.63	tetrahydrofuran
12	78	12:33.61	benzene
13	95	13:53.14	trichloroethene
14	58	15:20.80	4-methyl-2-pentanone
15	91	16:06.28	toluene
16	166	17:24.22	tetrachloroethene
17	112	18:30.79	chlorobenzene
18	91	19:12.97	1,3-dimethylbenzene
19	91	19:53.56	1,2-dimethylbenzene
20	83	20:24.43	1,1,2,2-tetrachloroethane

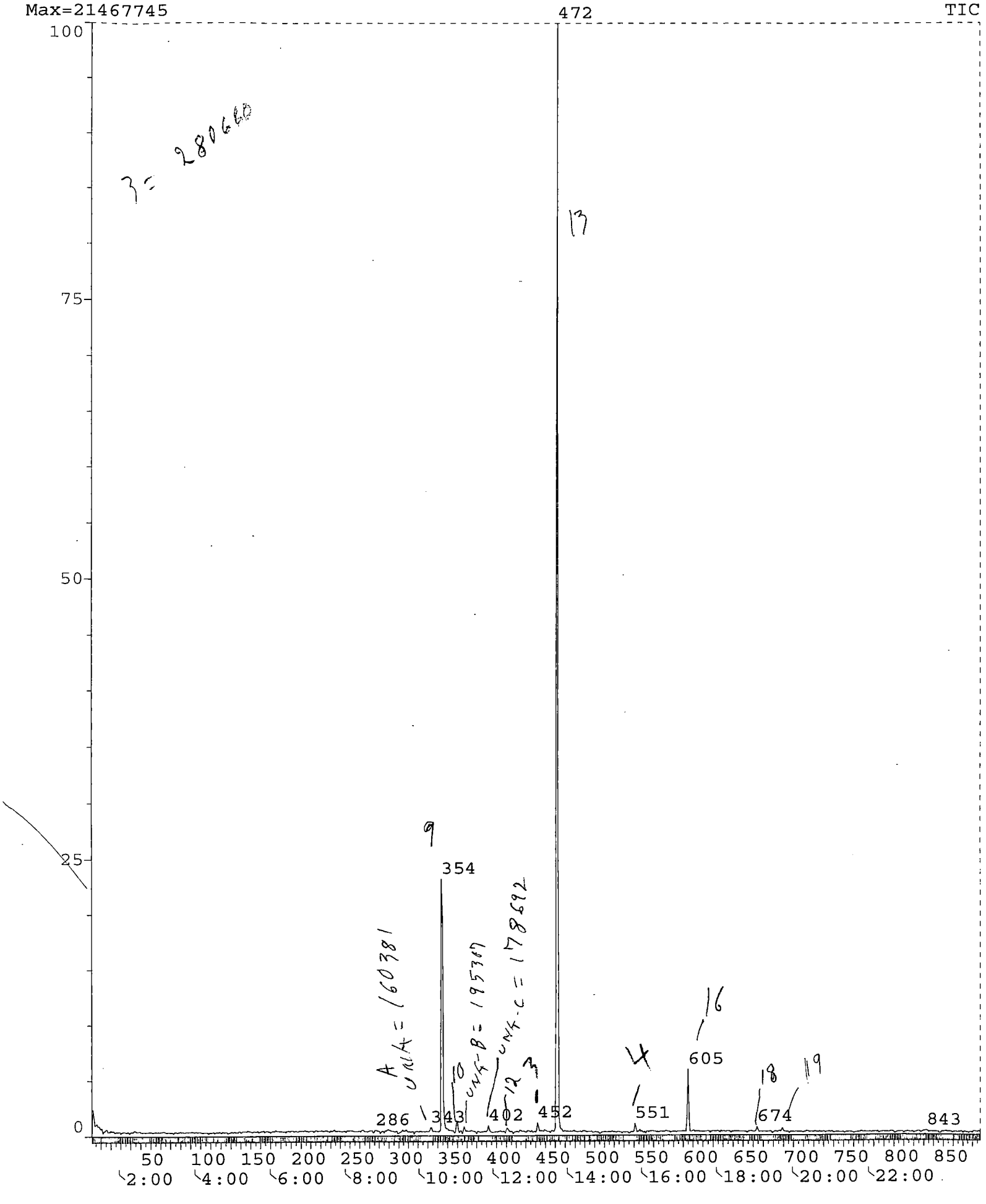
	Rec#	Target	ret.tm.	TS	fit	purity	MS	area	ppb	man.
*	1	50	Not Found							
*	2	62	Not Found							

*	3	58	Not Found					
*	4	45	Not Found					
*	5	84	Not Found					
	6	61	9:05.16	0.728	0.124	4636	1.13	*
*	7	63	Not Found					
*	8	72	Not Found					
	9	61	10:38.86	0.976	0.973	195816	75.18	*
	10	83	11:04.29	0.778	0.208	3772	0.80	*
*	11	72	Not Found					
*	12	78	Not Found					
	13	95	13:44.68	0.970	0.962	501641	163.32	
*	14	58	Not Found					
*	15	91	Not Found					
	16	166	17:15.86	0.962	0.949	54280	27.67	
*	17	112	Not Found					
*	18	91	Not Found					
	19	91	19:45.10	0.788	0.428	3484	0.44	*
*	20	83	Not Found					

ORIGINAL

Chromatogram: c:\ultra98\method\method\04sh84ex221 Scans 1 to 898
Run: 11/17/04 at 16:34:08 RTime 1:16.59 to 24:59.98
04SH84EX221

ORIGINAL



FULL SCAN Quantitation Report

ORIGINAL

Vial #2 : 04SH84EX221
FULL SCAN DATA : C:\ULTRA98\METHOD\method\04sh84EX221
Acquired 11/17/04 at 16:34:08
This Quantitation 11/17/04 at 16:59:52

Peak Search Method : C:\ULTRA98\METHOD\method\03FDVG.lsm
PQUAN Library : C:\ULTRA98\METHOD\method\LIBRARY\03FDVG
Last Calibration 11/17/04 at 15:42:25

Acquisition Method : C:\ULTRA98\METHOD\method\FDVG.fsm
Tune/Cal File : C:\ULTRA98\TUNC\MAN289.tnc
Datafile title:
04SH84EX221

W = RT +- (0:30.00 / 2 + RT * 0.010)
Min Fit=0.850; Min Pur=0.500; Min Area=100
Width= 3-40 scans; Res= 1 scans; NLM=2.0

REC NO.	Target	Pred. RT.	Internal Standard Name
1	130	11:02.65	bromochloromethane
2	65	12:02.74	1,2-dichloroethane-d4
3	114	13:20.68	1,4-difluorobenzene
4	98	15:59.80	toluene-d8
5	117	18:25.90	chlorobenzene-d5
6	95	20:43.87	bromofluorobenzene

	Rec#	Target	ret.tm.	TS	fit	purity	MS	area	ppb	man.	%RFC
*	1	130	Not Found								
*	2	65	Not Found								
	3	114	13:12.43	0.875		0.861		135892	35.00		
	4	98	15:49.47	0.502		0.491		106473	35.00	*	
*	5	117	Not Found								
*	6	95	Not Found								

REC NO.	Target	Pred. RT.	Analyte Name
1	50	1:57.19	chloromethane
2	62	2:31.30	vinyl chloride
3	58	6:44.56	acetone
4	45	7:17.18	2-propanol
5	84	8:08.98	methylene chloride
6	61	9:12.25	trans-1,2-dichloroethene
7	63	9:41.53	1,1-dichloroethane
8	72	10:31.84	2-butanone
9	61	10:46.45	cis-1,2-dichloroethene
10	83	11:09.19	chloroform
11	72	11:28.63	tetrahydrofuran
12	78	12:33.61	benzene
13	95	13:53.14	trichloroethene
14	58	15:20.80	4-methyl-2-pentanone
15	91	16:06.28	toluene
16	166	17:24.22	tetrachloroethene
17	112	18:30.79	chlorobenzene
18	91	19:12.97	1,3-dimethylbenzene
19	91	19:53.56	1,2-dimethylbenzene
20	83	20:24.43	1,1,2,2-tetrachloroethane

	Rec#	Target	ret.tm.	TS	fit	purity	MS	area	ppb	man.
*	1	50	Not Found							
	2	62	2:24.81	0.732		0.603		49334	22.35	*

*	3	58	Not Found					
*	4	45	Not Found					
	5	84	8:01.39	0.352	0.331	7087	2.74	ORIGINAL
	6	61	9:04.88	0.872	0.435	9596	2.19	*
	7	63	9:33.45	0.918	0.776	26901	3.84	
	8	72	10:36.88	0.098	0.003	9878	11.00	*
	9	61	10:36.88	0.980	0.979	3167183	1137.05	
	10	83	11:00.72	0.936	0.863	162491	32.30	
*	11	72	Not Found					
	12	78	12:24.81	0.764	0.732	35575	4.18	*
	13	95	13:44.18	0.983	0.975	6474244	1971.09	
*	14	58	Not Found					
	15	91	15:55.84	0.825	0.546	22270	2.35	*
	16	166	17:15.15	0.966	0.933	324947	154.90	
	17	112	18:21.83	0.741	0.460	7054	1.32	*
	18	91	19:04.67	0.982	0.947	43379	3.14	*
	19	91	19:44.33	0.970	0.947	63347	7.46	*
*	20	83	Not Found					

NIST Forward Search Report

ORIGINAL

Vial #2 : 04SH84EX221
FULL SCAN DATA : C:\ULTRA98\METHOD\method\04sh84EX221
Acquired 11/17/04 at 16:34:08
Peak Search Ran 11/17/04 at 16:59:52

Peak Search Method : C:\ULTRA98\METHOD\method\03FDVG.lsm
Acquisition Method : C:\ULTRA98\METHOD\method\FDVG.fsm
Tune/Cal File : C:\ULTRA98\TUNC\MAN289.tnc
Datafile title:
04SH84EX221

pk#	llim	peak	rlim	ret.tm.	area	%area
1.	1	2	4	1:18.13	944375	1.962%

1. SI=331; N-[2,2,2-Trifluoro-1-(isopropylamino)-1-(trifluoromethyl)ethyl
   Formula=C10H16F6N2O; MW=294; CAS#=0; EPA#=225944; DB#=10673
2. SI=261; d-Glucitol, 1-deoxy-1-(hexylamino)-
   Formula=C12H27NO5; MW=265; CAS#=74295504; EPA#=158731; DB#=51326
3. SI=257; Estra-1,3,5(10)-trien-17-one, 3,12á-dihydroxy-
   Formula=C18H22O3; MW=286; CAS#=17736140; EPA#=55052; DB#=97960
4. SI=248; 12-Hydroxydaphnetoxin
   Formula=C27H30O9; MW=498; CAS#=35302502; EPA#=103668; DB#=47375
5. SI=239; 1-Tridecanamine, N-tridecyl-
   Formula=C26H55N; MW=381; CAS#=5910758; EPA#=69944; DB#=85875

2.	4	6	10	1:24.50	953252	1.980%

1. SI=472; Benzeneethanamine, à-methyl-3-[4-methylphenyloxy]-
   Formula=C16H19NO; MW=241; CAS#=0; EPA#=126040; DB#=10713
2. SI=336; 4-Methylthio-2-5-dimethoxyamphetamine
   Formula=C12H19NO2S; MW=241; CAS#=61638071; EPA#=121432; DB#=11333
3. SI=323; Pregn-5-en-3-ol, 20-amino-, (3á,20S)-
   Formula=C21H35NO; MW=317; CAS#=5035109; EPA#=15075; DB#=10661
4. SI=322; 4-Methylthio-2,5-dimethoxyamphetamine
   Formula=C12H19NO2S; MW=241; CAS#=0; EPA#=120219; DB#=11332
5. SI=308; Pregnane-3,20-diamine, (3á,5à,20S)-
   Formula=C21H38N2; MW=318; CAS#=7050251; EPA#=15000; DB#=11379

3.	339	343	345	10:19.47	167395	0.348%

1. SI=629; Hexane
   Formula=C6H14; MW=86; CAS#=110543; EPA#=109472; DB#=4393
2. SI=584; Butane, 2-methyl-
   Formula=C5H12; MW=72; CAS#=78784; EPA#=53455; DB#=4658
3. SI=572; Hexane, 2-methyl-
   Formula=C7H16; MW=100; CAS#=591764; EPA#=61050; DB#=1502
4. SI=570; Butane, 2-azido-2,3,3-trimethyl-
   Formula=C7H15N3; MW=141; CAS#=51677419; EPA#=29026; DB#=15994
5. SI=567; Hexane, 2,2-dimethyl-
   Formula=C8H18; MW=114; CAS#=590738; EPA#=133593; DB#=4609

4.	375	377	379	11:13.41	195307	0.406%

1. SI=559; Cyclopentane, methyl-
   Formula=C6H12; MW=84; CAS#=96377; EPA#=114428; DB#=15051
2. SI=553; Cyclopentane, methyl-
   Formula=C6H12; MW=84; CAS#=96377; EPA#=19308; DB#=3975
3. SI=543; Cyclopentane, methyl-
   Formula=C6H12; MW=84; CAS#=96377; EPA#=151096; DB#=3978
4. SI=540; Cyclobutane, ethyl-
   Formula=C6H12; MW=84; CAS#=4806615; EPA#=114382; DB#=3935
5. SI=539; Cyclobutane, ethyl-
   Formula=C6H12; MW=84; CAS#=4806615; EPA#=504; DB#=14969

5.	400	402	404	11:53.07	178692	0.371%

1. SI=737; Ethane, 1,1,1-trichloro-
   Formula=C2H3Cl3; MW=132; CAS#=71556; EPA#=249209; DB#=10492
2. SI=721; Ethane, 1,1-dichloro-1-nitro-

Formula=C2H3Cl2NO2; MW=143; CAS#=594729; EPA#=4000; DB#=10490

3. SI=716; Ethane, 1,1,1-trichloro-
   Formula=C2H3Cl3; MW=132; CAS#=71556; EPA#=150911; DB#=10491
4. SI=706; Ethane, 1,1-dichloro-1-nitro-
   Formula=C2H3Cl2NO2; MW=143; CAS#=594729; EPA#=117142; DB#=10452
5. SI=698; Ethane, 1,1,1-trichloro-
   Formula=C2H3Cl3; MW=132; CAS#=71556; EPA#=229541; DB#=42287

ORIGINAL

Ex 221

53 = 280660

UNIT A

$$\frac{35}{280660} = \frac{x}{160381} \qquad x = 20.0$$

UNIT B

$$= \frac{x}{195307} = 24.4$$

UNIT C

$$= \frac{x}{178692} = 22.3$$

ORIGINAL

LORD® Chemical Products
A Division of Lord Corporation

2000 West Grandview Blvd.
PO Box 10038
Erie, PA 16514-0038

Phone: (814) 868-3611
Fax: (814) 864-3452

FAX Transmission

FAX No.	1-303-239-5454	Date:	2-26-2004
Attention:	[redacted]	From:	F. J. Drone
Company:	Brown and Caldwell	BC:	6005
City/State:		Pages:	6 to follow
Country:			
Our Ref:			
Re:	cc: Bob Nipper		

Bob,

Attached are the VOC results and Landfill data for ISVS samples collected at the Shope site on 2-18-04. Methane results will follow.

Fred Drone

GAS BAG ANALYSIS
DATA SHEET

ORIGINAL

	SAMPLE ID:	T.O. INFLUENT	(lab duplcate)		
	GCMS FILE	04SH750TOBI31D			
	Target Compound		Conc.(PPB)		
1	Chloromethane				
2	Vinyl Chloride		241.0		
3	Acetone				
4	2-Propanol				
5	Methylene Chloride		0.0		
6	Trans-1,2-Dichloroethene		0.0		
7	1,1-Dichloroethane		218.0		
8	2-Butanone (MEK)				
9	Cis-1,2-dichloroethene		43184.5	E	
10	Chloroform		1173.0		
11	Tetrahydrofuran				
12	Benzene		118.0		
13	Trichloroethene		110153.5	E	
14	4-Methyl-2-Pentanone (MIBK)				
15	Toluene		136.5		
16	Tetrachloroethene		5781.0		
17	Chlorobenzene		8.5		
18	1,3-Dimethylbenzene		56.0		
19	1,2-Dimethylbenzene		733.0		
20	1,1,2,2-Tetrachloroethane				
	TIC Compound(s)				
	(duplicate not searched)				

GAS BAG ANALYSIS
DATA SHEET

ORIGINAL

	SAMPLE ID:	LANDFILL HEADER			
	GCMS FILE	04SH750LH30			
	Target Compound		Conc.(PPB)		
1	Chloromethane				
2	Vinyl Chloride		571.5		
3	Acetone				
4	2-Propanol				
5	Methylene Chloride				
6	Trans-1,2-Dichloroethene				
7	1,1-Dichloroethane		237.5		
8	2-Butanone (MEK)				
9	Cis-1,2-dichloroethene		55031.0	E	
10	Chloroform		1452.0		
11	Tetrahydrofuran				
12	Benzene		106.0		
13	Trichloroethene		156452.0	E	
14	4-Methyl-2-Pentanone (MIBK)		10.0		
15	Toluene		215.5		
16	Tetrachloroethene		9319.0		
17	Chlorobenzene		31.0		
18	1,3-Dimethylbenzene		548.5		
19	1,2-Dimethylbenzene		1287.0		
20	1,1,2,2-Tetrachloroethane				
	TIC Compound(s)				
	UNKNOWN		595.0		
	UNKNOWN		625.0		

FORM I

GAS BAG ANALYSIS
DATA SHEET

ORIGINAL

	SAMPLE ID:	T.O. INFLUENT			
	GCMS FILE	04SH750TOBI31			
	Target Compound		Conc.(PPB)		
1	Chloromethane				
2	Vinyl Chloride		564.5		
3	Acetone				
4	2-Propanol				
5	Methylene Chloride		0.0		
6	Trans-1,2-Dichloroethene		0.0		
7	1,1-Dichloroethane		85.0		
8	2-Butanone (MEK)				
9	Cis-1,2-dichloroethene		34015.5	E	
10	Chloroform		711.5		
11	Tetrahydrofuran				
12	Benzene		32.0		
13	Trichloroethene		110051.0	E	
14	4-Methyl-2-Pentanone (MIBK)				
15	Toluene		55.5		
16	Tetrachloroethene		6719.5		
17	Chlorobenzene		14.0		
18	1,3-Dimethylbenzene		415.0		
19	1,2-Dimethylbenzene		1007.0		
20	1,1,2,2-Tetrachloroethane				
	TIC Compound(s)				
	unknown		870.0		
	unknown silane		82400.0		

ORIGINAL

GAS BAG ANALYSIS
DATA SHEET

	SAMPLE ID:	**T.O. EXHAUST**			
	GCMS FILE	04SH750TOE32			
	Target Compound		Conc.(PPB)		
1	Chloromethane				
2	Vinyl Chloride				
3	Acetone				
4	2-Propanol				
5	Methylene Chloride				
6	Trans-1,2-Dichloroethene		2.7		
7	1,1-Dichloroethane				
8	2-Butanone (MEK)				
9	Cis-1,2-dichloroethene				
10	Chloroform				
11	Tetrahydrofuran				
12	Benzene				
13	Trichloroethene		33.4		
14	4-Methyl-2-Pentanone (MIBK)				
15	Toluene				
16	Tetrachloroethene		34.3		
17	Chlorobenzene				
18	1,3-Dimethylbenzene				
19	1,2-Dimethylbenzene				
20	1,1,2,2-Tetrachloroethane				
	TIC Compound(s)				
	Carbonic dichloride (phosgene)		3524		
	UNKNOWN SILANE		85.0		

FORM I

GAS BAG ANALYSIS
DATA SHEET

ORIGINAL

	SAMPLE ID:	**METHOD BLANK**			
	GCMS FILE	04VGMB4049			
	Target Compound		Conc.(PPB)		
1	Chloromethane				
2	Vinyl Chloride				
3	Acetone				
4	2-Propanol				
5	Methylene Chloride				
6	Trans-1,2-Dichloroethene				
7	1,1-Dichloroethane				
8	2-Butanone (MEK)				
9	Cis-1,2-dichloroethene				
10	Chloroform				
11	Tetrahydrofuran				
12	Benzene				
13	Trichloroethene				
14	4-Methyl-2-Pentanone (MIBK)				
15	Toluene				
16	Tetrachloroethene				
17	Chlorobenzene				
18	1,3-Dimethylbenzene				
19	1,2-Dimethylbenzene				
20	1,1,2,2-Tetrachloroethane				
	TIC Compound(s)				

ORIGINAL

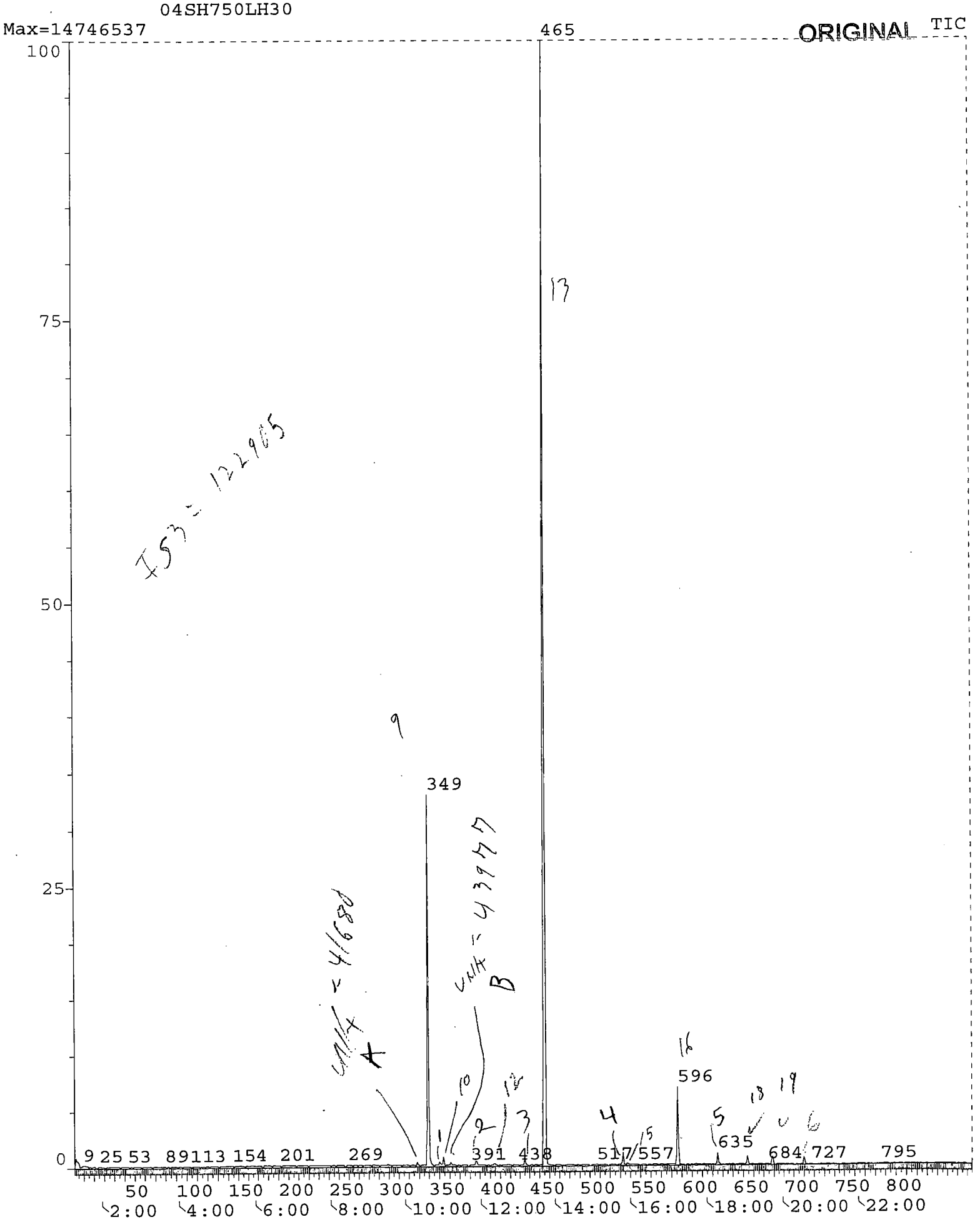
VOC samples collected at Shope on 2-18-04

Sample I.D.:	Sampling Point:
METHOD BLANK	Lab Blank
T.O. EXHAUST	Thermal Oxidizer Effluent
T.O. INFLUENT	Thermal Oxidizer Influent
LANDFILL HEADER	Landfill Header
T.O. INFLUENT (lab duplicate)	Thermal Oxidizer Influent

Guages: Landfill Header @ 0.45 in. water

Monitor:			
at time:	Landfill Flow	146	SCFM
10:00	Ext. Vapor Temp.	52	deg. F
	Ext. Vapor Vac.	40	in. water

Chromatogram: c:\ultra98\method\method\04sh750lh30 Scans 1 to 885
Run: 02/18/04 at 14:26:08 RTime 1:16.59 to 24:59.49
04SH750LH30



FULL SCAN Quantitation Report

ORIGINAL

Vial #2 : 04SH750LH30
FULL SCAN DATA : C:\ULTRA98\METHOD\method\04SH750LH30
Acquired 02/18/04 at 14:26:08
This Quantitation 02/18/04 at 14:52:29

Peak Search Method : C:\ULTRA98\METHOD\method\03FDVG.lsm
PQUAN Library : C:\ULTRA98\METHOD\method\LIBRARY\03FDVG
Last Calibration 02/18/04 at 10:42:18

Acquisition Method : C:\ULTRA98\METHOD\method\FDVG.fsm
Tune/Cal File : C:\ULTRA98\TUNC\FDdec303.tnc
Datafile title:
04SH750LH30

W = RT +- (0:30.00 / 2 + RT * 0.010)
Min Fit=0.850; Min Pur=0.500; Min Area=100
Width= 3-40 scans; Res= 1 scans; NLM=2.0

REC NO.	Target	Pred. RT.	Internal Standard Name
1	130	11:02.65	bromochloromethane
2	65	12:02.74	1,2-dichloroethane-d4
3	114	13:20.68	1,4-difluorobenzene
4	98	15:59.80	toluene-d8
5	117	18:25.90	chlorobenzene-d5
6	95	20:43.87	bromofluorobenzene

Rec#	Target	ret.tm.	TS	fit	purity	MS	area	ppb	man.	%RFC
1	130	10:54.46		0.568	0.129		5199	35.00	*	
2	65	11:54.00		0.721	0.721		16526	35.00	*	
3	114	13:11.28		0.888	0.887		85685	35.00		
4	98	15:49.03		0.504	0.503		104175	35.00	*	
5	117	18:17.11		0.951	0.946		77067	35.00		
6	95	20:33.93		0.826	0.803		56982	35.00	*	

REC NO.	Target	Pred. RT.	Analyte Name
1	50	1:57.19	chloromethane
2	62	2:31.30	vinyl chloride
3	58	6:44.56	acetone
4	59	7:22.23	2-PROPANOL
5	84	8:08.98	methylene chloride
6	61	9:12.25	trans-1,2-dichloroethene
7	63	9:41.53	1,1-dichloroethane
8	72	10:31.84	2-butanone
9	61	10:46.45	cis-1,2-dichloroethene
10	83	11:09.19	chloroform
11	72	11:28.63	tetrahydrofuran
12	78	12:33.61	benzene
13	95	13:53.14	trichloroethene
14	58	15:20.80	4-methyl-2-pentanone
15	91	16:06.28	toluene
16	166	17:24.22	tetrachloroethene
17	112	18:30.79	chlorobenzene
18	91	19:12.97	1,3-dimethylbenzene
19	91	19:53.56	1,2-dimethylbenzene
20	83	20:24.43	1,1,2,2-tetrachloroethane

	Rec#	Target	ret.tm.	TS	fit	purity	MS	area	ppb	man.
*	1	50	Not Found							
	2	62	2:24.20		0.695	0.601		4293	11.43	*

ORIGINAL

*	3	58	Not Found					
*	4	59	Not Found					
*	5	84	Not Found					
*	6	61	Not Found					
	7	63	9:32.35	0.936	0.910	11351	4.75	
*	8	72	Not Found					
	9	61	10:36.72	0.989	0.982	2211735	1100.62	
	10	83	11:00.89	0.900	0.899	60372	29.04	
*	11	72	Not Found					
	12	78	12:23.00	0.697	0.602	8167	2.12	*
	13	95	13:43.47	0.985	0.976	4468009	3129.04	
*	14	58	Not Found					
	15	91	15:55.45	0.919	0.880	17620	4.31	
	16	166	17:14.33	0.972	0.935	231304	186.38	
	17	112	18:20.35	0.602	0.602	1517	0.62	*
	18	91	19:03.79	0.977	0.976	80731	10.97	
	19	91	19:44.00	0.968	0.961	91644	25.74	
*	20	83	Not Found					

LH 38

ORIGINAL

UNA A

$$\frac{35}{122905} = \frac{x}{41680}$$

$x = 11.9$

$11.9 \times 50 = 595$

UNA B

$$\frac{35}{122905} = \frac{x}{43977}$$

$x = 12.5$

$12.5 \times 50 = 625$

NIST Forward Search Report

ORIGINAL

Vial #2 : 04SH750LH30
FULL SCAN DATA : C:\ULTRA98\METHOD\method\04SH750LH30
Acquired 02/18/04 at 14:26:08
Peak Search Ran 02/18/04 at 14:52:29

Peak Search Method : C:\ULTRA98\METHOD\method\03FDVG.lsm
Acquisition Method : C:\ULTRA98\METHOD\method\FDVG.fsm
Tune/Cal File : C:\ULTRA98\TUNC\FDdec303.tnc
Datafile title:
04SH750LH30

pk#	llim	peak	rlim	ret.tm.	area	%area
1.	1	2	7	1:18.24	368903	1.121%

1. SI=657; Borane, trimethyl-
Formula=C3H9B; MW=56; CAS#=593908; EPA#=108; DB#=613
2. SI=646; Borane, trimethyl-
Formula=C3H9B; MW=56; CAS#=593908; EPA#=151494; DB#=1634
3. SI=628; Acetonitrile
Formula=C2H3N; MW=41; CAS#=75058; EPA#=18850; DB#=610
4. SI=614; Methane, isocyano-
Formula=C2H3N; MW=41; CAS#=593759; EPA#=47; DB#=1633
5. SI=604; Acetonitrile
Formula=C2H3N; MW=41; CAS#=75058; EPA#=48; DB#=611

2.	337	338	341	10:19.04	97261	0.296%

1. SI=616; Cyclopropene
Formula=C3H4; MW=40; CAS#=0; EPA#=194058; DB#=1232
2. SI=594; 1,2-Propadiene
Formula=C3H4; MW=40; CAS#=463490; EPA#=45; DB#=1401
3. SI=558; Propane, 2-methyl-1-nitro-
Formula=C4H9NO2; MW=103; CAS#=625741; EPA#=65890; DB#=2237
4. SI=555; 1-Propyne
Formula=C3H4; MW=40; CAS#=74997; EPA#=18849; DB#=1402
5. SI=552; 2-Butyne-1,4-diol
Formula=C4H6O2; MW=86; CAS#=110656; EPA#=220897; DB#=502

3.	368	371	373	11:12.15	63311	0.192%

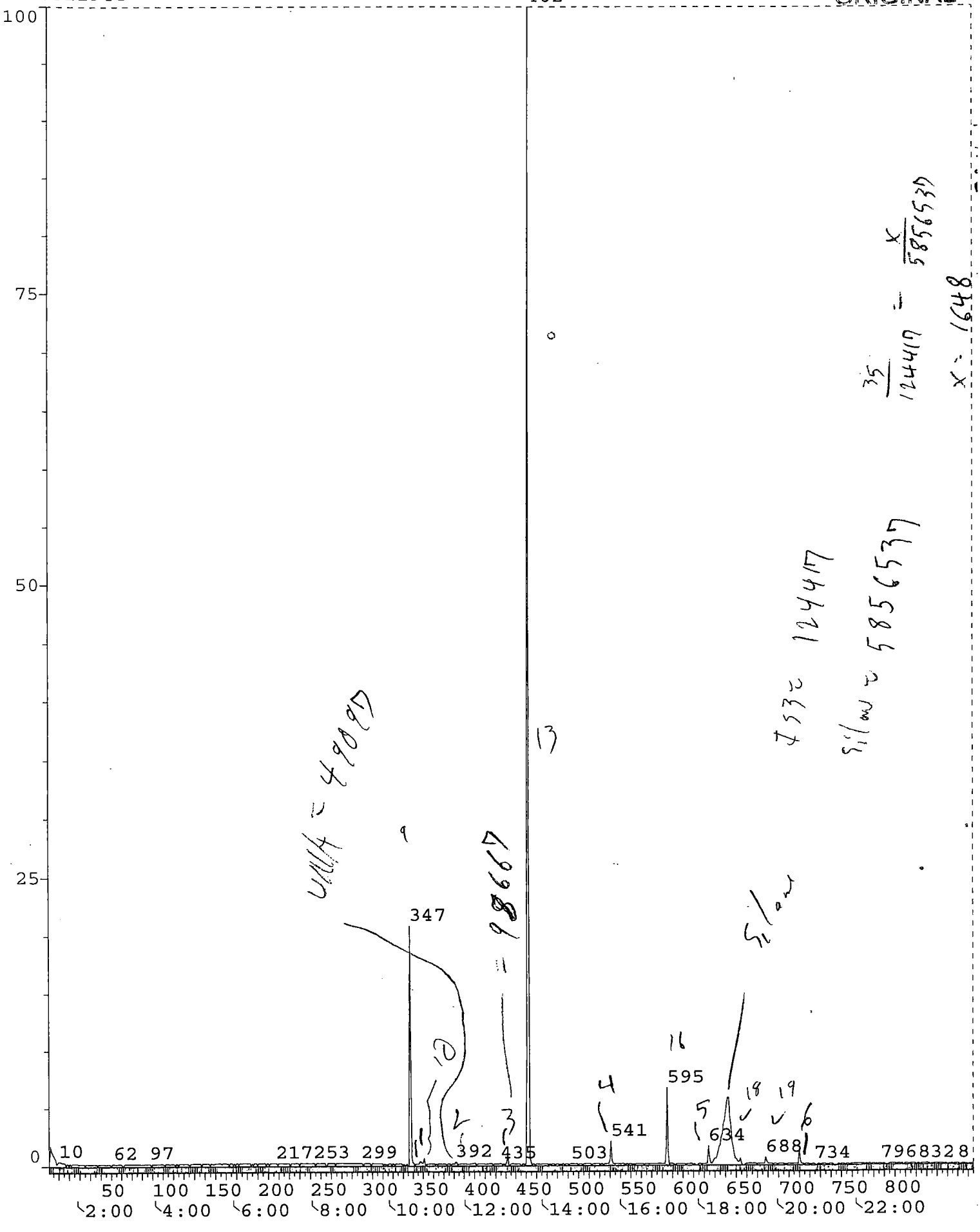
1. SI=608; Cyclopropane, (1-methylethyl)-
Formula=C6H12; MW=84; CAS#=3638355; EPA#=502; DB#=14977
2. SI=590; Cyclobutane, ethyl-
Formula=C6H12; MW=84; CAS#=4806615; EPA#=114382; DB#=3935
3. SI=582; 2-Propenal
Formula=C3H4O; MW=56; CAS#=107028; EPA#=114921; DB#=3914
4. SI=581; Cyclobutane, 1,2,3,4-tetramethyl-
Formula=C8H16; MW=112; CAS#=69531573; EPA#=151207; DB#=15023
5. SI=579; Cyclobutane, ethyl-
Formula=C6H12; MW=84; CAS#=4806615; EPA#=504; DB#=14969

4.	391	396	399	11:52.41	120738	0.367%

1. SI=779; Ethane, 1,1-dichloro-1-nitro-
Formula=C2H3Cl2NO2; MW=143; CAS#=594729; EPA#=4000; DB#=10490
2. SI=732; Ethane, 1,1,1-trichloro-
Formula=C2H3Cl3; MW=132; CAS#=71556; EPA#=249209; DB#=10492
3. SI=724; Ethane, 1,1,1-trichloro-
Formula=C2H3Cl3; MW=132; CAS#=71556; EPA#=150911; DB#=10491
4. SI=722; Ethane, 1,1-dichloro-1-nitro-
Formula=C2H3Cl2NO2; MW=143; CAS#=594729; EPA#=117142; DB#=10452
5. SI=712; Ethane, 1,1-dichloro-1-nitro-
Formula=C2H3Cl2NO2; MW=143; CAS#=594729; EPA#=21252; DB#=42144

Chromatogram: c:\ultra98\method\method\04sh750tobi31 Scans 1 to 885
Run: 02/18/04 at 13:35:03 RTime 1:16.65 to 24:59.66
04SH750TOBI31

Max=10322944 462 ORIGINAL TIC



TOBF 3/

ORIGINAL

$$\frac{35}{98667} = \frac{x}{49097}$$

$x = 17.4$

$17.4 \times 50 = 870$

FULL SCAN Quantitation Report

ORIGINAL

Vial #2 : 04SH750TOBI31
FULL SCAN DATA : C:\ULTRA98\METHOD\method\04SH750TOBI31
Acquired 02/18/04 at 13:35:03
This Quantitation 02/18/04 at 14:01:02

Peak Search Method : C:\ULTRA98\METHOD\method\03FDVG.lsm
PQUAN Library : C:\ULTRA98\METHOD\method\LIBRARY\03FDVG
Last Calibration 02/18/04 at 10:42:18

Acquisition Method : C:\ULTRA98\METHOD\method\FDVG.fsm
Tune/Cal File : C:\ULTRA98\TUNC\FDdec303.tnc
Datafile title:
04SH750TOBI31

W = RT +- (0:30.00 / 2 + RT * 0.010)
Min Fit=0.850; Min Pur=0.500; Min Area=100
Width= 3-40 scans; Res= 1 scans; NLM=2.0

REC NO.	Target	Pred. RT.	Internal Standard Name
1	130	11:02.65	bromochloromethane
2	65	12:02.74	1,2-dichloroethane-d4
3	114	13:20.68	1,4-difluorobenzene
4	98	15:59.80	toluene-d8
5	117	18:25.90	chlorobenzene-d5
6	95	20:43.87	bromofluorobenzene

Rec#	Target	ret.tm.	TS fit	purity	MS	area	ppb	man.	%RFC
1	130	10:49.69	0.557	0.131		3031	35.00	*	
2	65	11:49.23	0.540	0.540		5280	35.00	*	
3	114	13:06.51	0.880	0.878		71863	35.00		
4	98	15:45.85	0.513	0.504		117260	35.00	*	
5	117	18:15.57	0.959	0.956		84985	35.00		
6	95	20:33.99	0.837	0.815		61968	35.00	*	

REC NO.	Target	Pred. RT.	Analyte Name
1	50	1:57.19	chloromethane
2	62	2:31.30	vinyl chloride
3	58	6:44.56	acetone
4	59	7:22.23	2-PROPANOL
5	84	8:08.98	methylene chloride
6	61	9:12.25	trans-1,2-dichloroethene
7	63	9:41.53	1,1-dichloroethane
8	72	10:31.84	2-butanone
9	61	10:46.45	cis-1,2-dichloroethene
10	83	11:09.19	chloroform
11	72	11:28.63	tetrahydrofuran
12	78	12:33.61	benzene
13	95	13:53.14	trichloroethene
14	58	15:20.80	4-methyl-2-pentanone
15	91	16:06.28	toluene
16	166	17:24.22	tetrachloroethene
17	112	18:30.79	chlorobenzene
18	91	19:12.97	1,3-dimethylbenzene
19	91	19:53.56	1,2-dimethylbenzene
20	83	20:24.43	1,1,2,2-tetrachloroethane

	Rec#	Target	ret.tm.	TS fit	purity	MS	area	ppb	man.
*	1	50	Not Found						
	2	62	2:25.86	0.695	0.694		3555	11.29	*

ORIGINAL

*	3	58	Not Found					
*	4	59	Not Found					
*	5	84	Not Found					
*	6	61	Not Found					
	7	63	9:32.41	0.903	0.903	3406	1.70	
	8	72	10:33.60	0.864	0.012	270	1.79	*
	9	61	10:33.60	0.984	0.981	1146584	680.31	
	10	83	10:56.12	0.897	0.895	24816	14.23	
*	11	72	Not Found					
	12	78	12:16.64	0.697	0.577	2060	0.64	*
	13	95	13:38.69	0.987	0.976	2635890	2201.02	
*	14	58	Not Found					
	15	91	15:52.33	0.909	0.762	3817	1.11	
	16	166	17:12.79	0.973	0.910	139875	134.39	
	17	112	18:18.76	0.482	0.101	583	0.28	*
	18	91	19:03.85	0.971	0.970	51221	8.30	
	19	91	19:42.47	0.956	0.956	60127	20.14	
*	20	83	Not Found					

NIST Forward Search Report

ORIGINAL

Vial #2 : 04SH750TOBI31
FULL SCAN DATA : C:\ULTRA98\METHOD\method\04SH750TOBI31
Acquired 02/18/04 at 13:35:03
Peak Search Ran 02/18/04 at 14:01:02

Peak Search Method : C:\ULTRA98\METHOD\method\03FDVG.lsm
Acquisition Method : C:\ULTRA98\METHOD\method\FDVG.fsm
Tune/Cal File : C:\ULTRA98\TUNC\FDdec303.tnc
Datafile title:
04SH750TOBI31

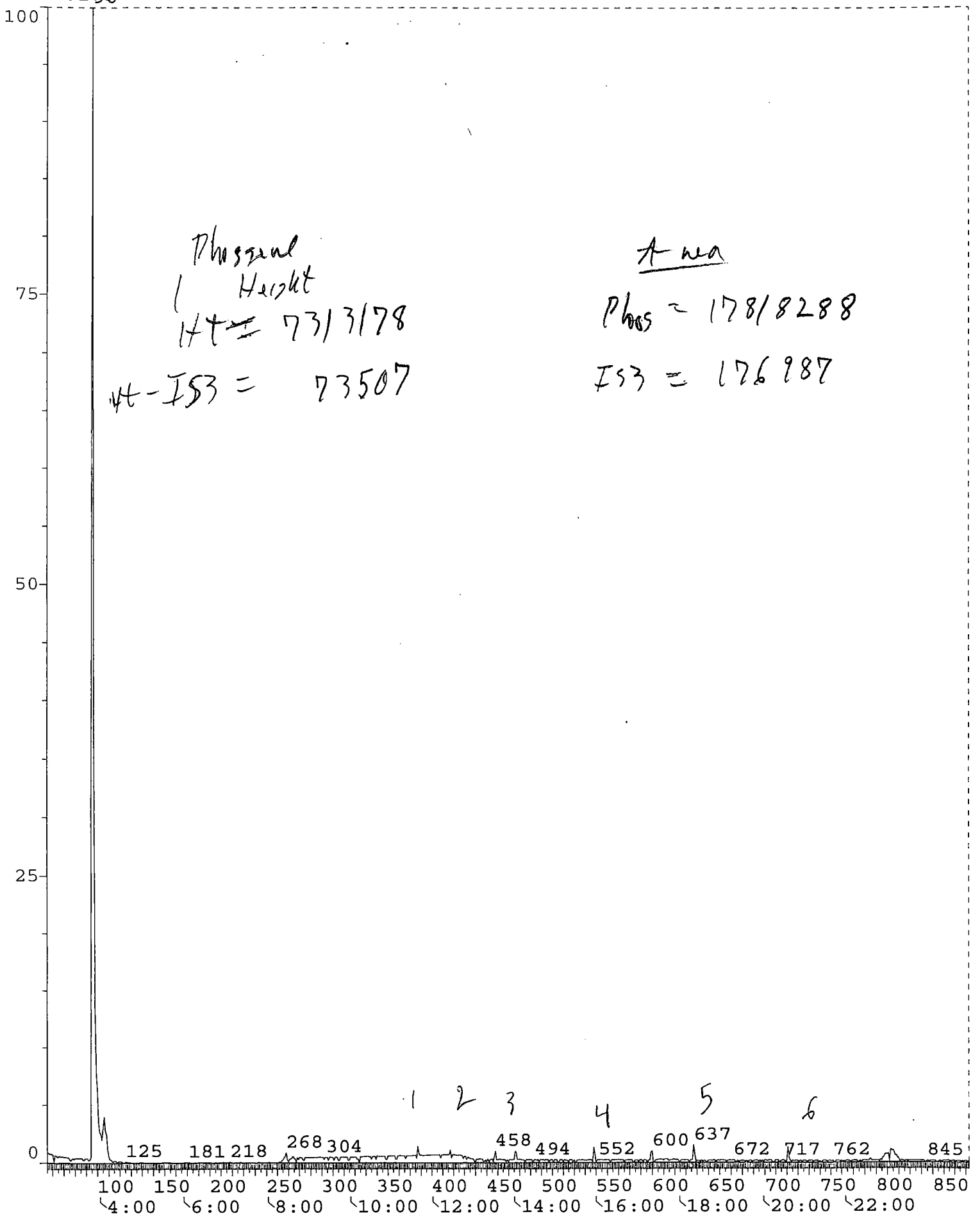
pk#	llim	peak	rlim	ret.tm.	area	%area
1.	1	2	8	1:18.24	610972	2.470%

1. SI=546; Acetonitrile
   Formula=C2H3N; MW=41; CAS#=75058; EPA#=18850; DB#=610
2. SI=511; Methane, isocyano-
   Formula=C2H3N; MW=41; CAS#=593759; EPA#=47; DB#=1633
3. SI=508; Acetonitrile
   Formula=C2H3N; MW=41; CAS#=75058; EPA#=48; DB#=611
4. SI=494; Acetonitrile
   Formula=C2H3N; MW=41; CAS#=75058; EPA#=18852; DB#=1632
5. SI=443; Propanenitrile, 3-hydroxy-
   Formula=C3H5NO; MW=71; CAS#=109784; EPA#=135384; DB#=1059

2.	641	652	662	18:44.52	4686792	18.948%

1. SI=809; Silane, tetramethyl-
   Formula=C4H12Si; MW=88; CAS#=75763; EPA#=149358; DB#=6964
2. SI=799; Silane, tetramethyl-
   Formula=C4H12Si; MW=88; CAS#=75763; EPA#=19500; DB#=25349
3. SI=772; Silane, tetramethyl-
   Formula=C4H12Si; MW=88; CAS#=75763; EPA#=670; DB#=6940
4. SI=712; 1-Propene-1-thiol
   Formula=C3H6S; MW=74; CAS#=925893; EPA#=250208; DB#=25348
5. SI=697; Silane, trimethyl-2-propenyl-
   Formula=C6H14Si; MW=114; CAS#=762721; EPA#=63588; DB#=25521

Chromatogram: c:\ultra98\method\method\04sh750toe32 Scans 55 to 883
Run: 02/18/04 at 12:07:24 RTime 2:43.54 to 24:56.25
04SH750TOE32
Max=7313178 ORIGINAL TIC

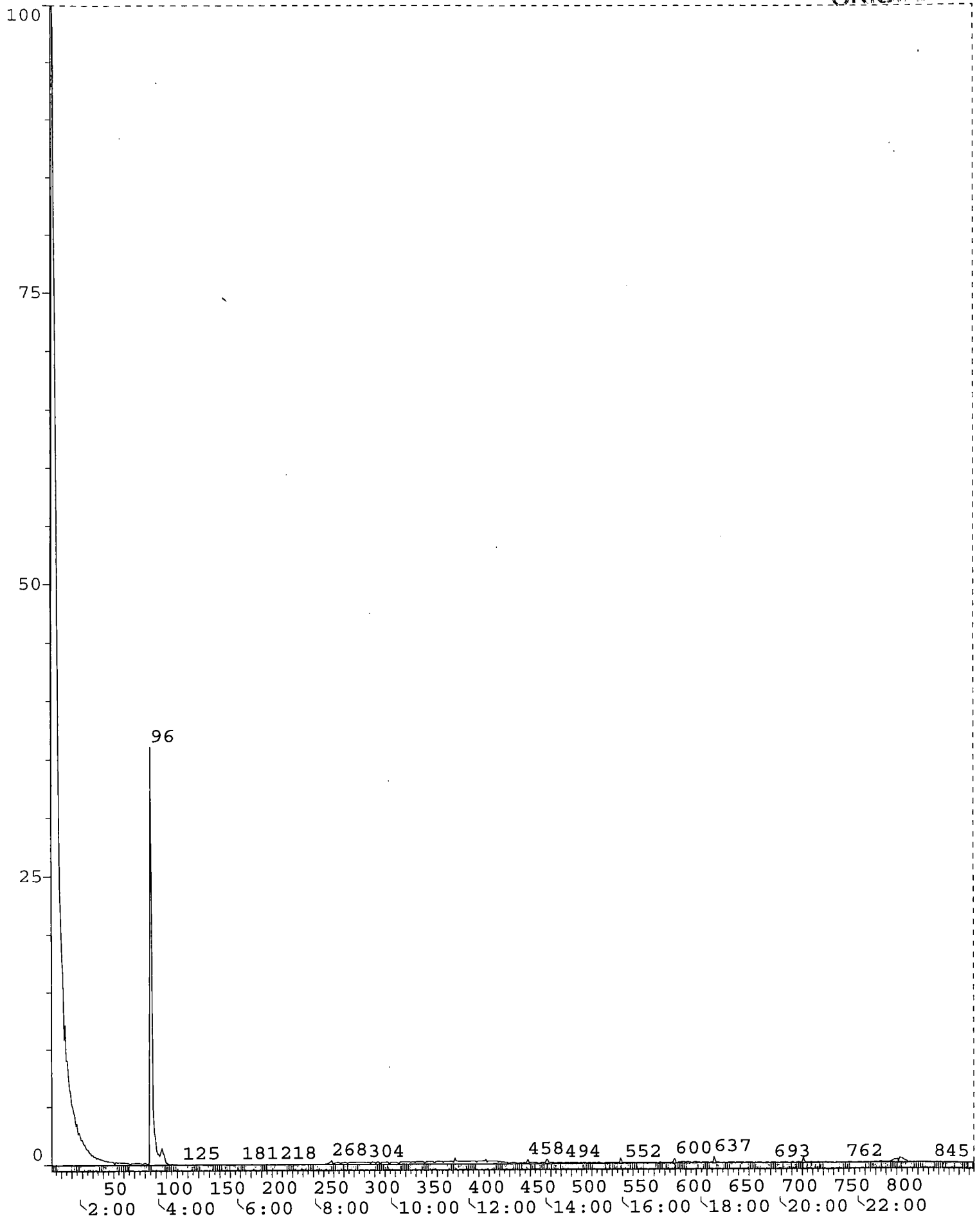


Phosgene
Height
Ht = 7313178
Ht-IS3 = 73507

Area
Phos = 17818288
IS3 = 176987

Chromatogram: c:\ultra98\method\method\04sh750toe32 Scans 1 to 885
Run: 02/18/04 at 12:07:24 RTime 1:16.59 to 24:59.49
04SH750TOE32
Max=20275522

ORIGINAL



FULL SCAN Quantitation Report

Vial #2 : 04SH750TOE32
FULL SCAN DATA : C:\ULTRA98\METHOD\method\04SH750TOE32
Acquired 02/18/04 at 12:07:24
This Quantitation 02/18/04 at 12:34:10

ORIGINAL

Peak Search Method : C:\ULTRA98\METHOD\method\03FDVG.lsm
PQUAN Library : C:\ULTRA98\METHOD\method\LIBRARY\03FDVG
Last Calibration 02/18/04 at 10:42:18

Acquisition Method : C:\ULTRA98\METHOD\method\FDVG.fsm
Tune/Cal File : C:\ULTRA98\TUNC\FDdec303.tnc
Datafile title:
04SH750TOE32

W = RT +- (0:30.00 / 2 + RT * 0.010)
Min Fit=0.850; Min Pur=0.500; Min Area=100
Width= 3-40 scans; Res= 1 scans; NLM=2.0

REC NO.	Target	Pred. RT.	Internal Standard Name
1	130	11:02.65	bromochloromethane
2	65	12:02.74	1,2-dichloroethane-d4
3	114	13:20.68	1,4-difluorobenzene
4	98	15:59.80	toluene-d8
5	117	18:25.90	chlorobenzene-d5
6	95	20:43.87	bromofluorobenzene

Rec#	Target	ret.tm.	TS fit	purity	MS	area	ppb	man.	%RFC
1	130	11:37.91	0.579	0.161		9539	35.00	*	
2	65	12:26.19	0.649	0.644		17706	35.00	*	
3	114	13:32.21	0.891	0.800		53129	35.00		
4	98	15:57.04	0.487	0.487		71956	35.00	*	
5	117	18:20.29	0.939	0.937		47876	35.00		
6	95	20:35.52	0.834	0.833		43337	35.00	*	

REC NO.	Target	Pred. RT.	Analyte Name
1	50	1:57.19	chloromethane
2	62	2:31.30	vinyl chloride
3	58	6:44.56	acetone
4	59	7:22.23	2-PROPANOL
5	84	8:08.98	methylene chloride
6	61	9:12.25	trans-1,2-dichloroethene
7	63	9:41.53	1,1-dichloroethane
8	72	10:31.84	2-butanone
9	61	10:46.45	cis-1,2-dichloroethene
10	83	11:09.19	chloroform
11	72	11:28.63	tetrahydrofuran
12	78	12:33.61	benzene
13	95	13:53.14	trichloroethene
14	58	15:20.80	4-methyl-2-pentanone
15	91	16:06.28	toluene
16	166	17:24.22	tetrachloroethene
17	112	18:30.79	chlorobenzene
18	91	19:12.97	1,3-dimethylbenzene
19	91	19:53.56	1,2-dimethylbenzene
20	83	20:24.43	1,1,2,2-tetrachloroethane

	Rec#	Target	ret.tm.	TS fit	purity	MS	area	ppb	man.
*	1	50	Not Found						
*	2	62	Not Found						

ORIGINAL

*	3	58	Not Found					
*	4	59	Not Found					
*	5	84	Not Found					
	6	61	9:08.23	0.752	0.373	2837	2.70	*
*	7	63	Not Found					
*	8	72	Not Found					
*	9	61	Not Found					
*	10	83	Not Found					
*	11	72	Not Found					
*	12	78	Not Found					
	13	95	14:01.15	0.955	0.954	29574	33.40	
*	14	58	Not Found					
*	15	91	Not Found					
	16	166	17:19.16	0.898	0.894	26397	34.30	
*	17	112	Not Found					
*	18	91	Not Found					
*	19	91	Not Found					
*	20	83	Not Found					

TOE 32

ORIGINAL

Phosgene

Ht

$$\frac{35}{73507} = \frac{x}{7313178}$$

$x = 3482$

A

$$\frac{35}{176987} = \frac{x}{17818288}$$

$x = 3524$

Silane

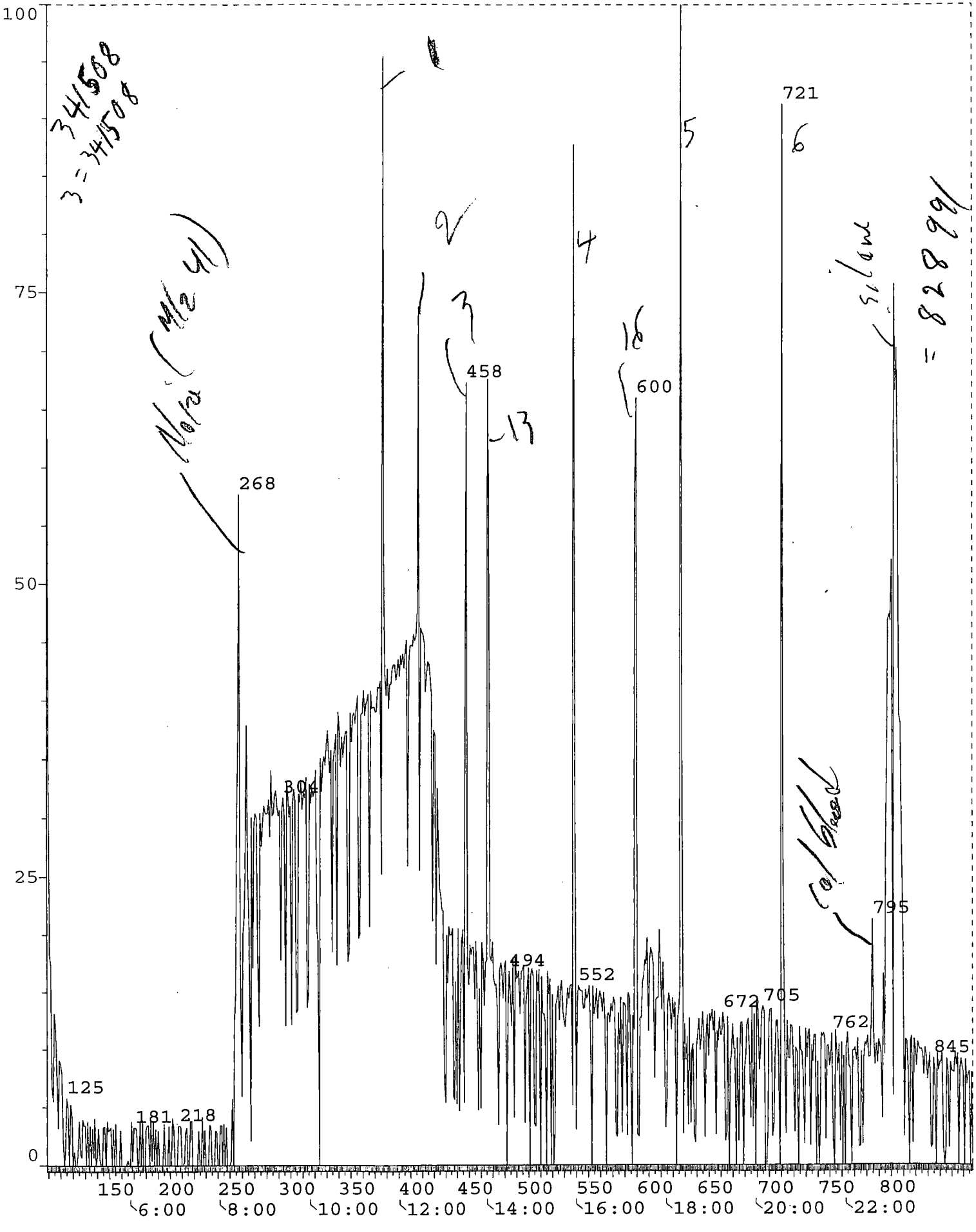
$$\frac{35}{341508} = \frac{x}{828991}$$

$x = 84.96$

Chromatogram: c:\ultra98\method\method\04sh750toe32 Scans 109 to 878
Run: 02/18/04 at 12:07:24 RTime 4:10.43 to 24:48.23
04SH750TOE32

ORIGINAL

Max=109190 TIC



NIST Forward Search Report

ORIGINAL

Vial #2 : 04SH750TOE32
FULL SCAN DATA : C:\ULTRA98\METHOD\method\04SH750TOE32
Acquired 02/18/04 at 12:07:24
Peak Search Ran 02/18/04 at 12:34:10

Peak Search Method : C:\ULTRA98\METHOD\method\03FDVG.lsm
Acquisition Method : C:\ULTRA98\METHOD\method\FDVG.fsm
Tune/Cal File : C:\ULTRA98\TUNC\FDdec303.tnc
Datafile title:
04SH750TOE32

pk#	llim	peak	rlim	ret.tm.	area	%area
1.	1	2	13	1:18.24	118602336	73.801%

1. SI=850; Propene
Formula=C3H6; MW=42; CAS#=115071; EPA#=61300; DB#=1533
2. SI=840; Propene
Formula=C3H6; MW=42; CAS#=115071; EPA#=50; DB#=571
3. SI=806; Cyclopropane
Formula=C3H6; MW=42; CAS#=75194; EPA#=61299; DB#=3264
4. SI=786; Cyclopropane
Formula=C3H6; MW=42; CAS#=75194; EPA#=18854; DB#=1107
5. SI=782; Cyclopropane
Formula=C3H6; MW=42; CAS#=75194; EPA#=18855; DB#=1106

2.	13	14	24	1:37.52	16454984	10.239%

1. SI=706; Butanenitrile
Formula=C4H7N; MW=69; CAS#=109740; EPA#=46212; DB#=1478
2. SI=667; Acetonitrile
Formula=C2H3N; MW=41; CAS#=75058; EPA#=18850; DB#=610
3. SI=648; Butanenitrile
Formula=C4H7N; MW=69; CAS#=109740; EPA#=235; DB#=549
4. SI=600; Propanenitrile, 3-hydroxy-
Formula=C3H5NO; MW=71; CAS#=109784; EPA#=134423; DB#=433
5. SI=573; Methane, isocyano-
Formula=C2H3N; MW=41; CAS#=593759; EPA#=47; DB#=1633

3.	24	25	26	1:55.26	1739426	1.082%

1. SI=788; Acetonitrile
Formula=C2H3N; MW=41; CAS#=75058; EPA#=221259; DB#=612
2. SI=526; 1-Propene, 3-(ethenyloxy)-
Formula=C5H8O; MW=84; CAS#=3917155; EPA#=522; DB#=1544
3. SI=495; 1-Propene, 3-(1,1-dimethylethoxy)-
Formula=C7H14O; MW=114; CAS#=1471041; EPA#=46332; DB#=2280
4. SI=465; Propane, 2-methyl-1-nitro-
Formula=C4H9NO2; MW=103; CAS#=625741; EPA#=65890; DB#=2237
5. SI=459; Propene
Formula=C3H6; MW=42; CAS#=115071; EPA#=61300; DB#=1533

4.	26	27	39	1:58.44	3756302	2.337%

1. SI=810; Acetonitrile
Formula=C2H3N; MW=41; CAS#=75058; EPA#=221259; DB#=612
2. SI=517; 1-Propene, 3-(1,1-dimethylethoxy)-
Formula=C7H14O; MW=114; CAS#=1471041; EPA#=46332; DB#=2280
3. SI=483; 1-Propene, 3-(ethenyloxy)-
Formula=C5H8O; MW=84; CAS#=3917155; EPA#=522; DB#=1544
4. SI=455; 2-Propenoic acid, 2-methyl-, ethenyl ester
Formula=C6H8O2; MW=112; CAS#=4245378; EPA#=1663; DB#=2462
5. SI=454; n-Propanesulphonylacetonitrile
Formula=C5H9NO2S; MW=147; CAS#=0; EPA#=136031; DB#=1669

5.	92	96	104	3:49.50	17018038	10.590%

1. SI=835; Phosgene
Formula=CCl2O; MW=98; CAS#=75445; EPA#=226255; DB#=20520
2. SI=831; Phosgene

Formula=CCl2O; MW=98; CAS#=75445; EPA#=34341; DB#=5660

3. SI=727; Oxalyl chloride
   Formula=C2Cl2O2; MW=126; CAS#=79378; EPA#=158408; DB#=5646
4. SI=655; Oxalyl chloride
   Formula=C2Cl2O2; MW=126; CAS#=79378; EPA#=2589; DB#=20546
5. SI=583; Ethane, 1,1-dichloro-
   Formula=C2H4Cl2; MW=98; CAS#=75343; EPA#=19755; DB#=5643

ORIGINAL